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AUDIT WORKING PAPERS

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Their Preparation and Content

BY

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PREFACE

The literature of accountancy has increased so rapidly during recent years that at the present time the practitioner, the instructor, or the student may find information upon almost any part of the subject in which he may be interested. The subject of working papers, however, which from a practical standpoint forms one of the most important phases of an auditor's work, has received little attention and three or four short references constitute the only available material.

A discussion of this technical phase of the public accountant's work is the aim of this book. Yet it is impossible to discuss fully all types of working papers in a single volume, and because of the relative importance of the balance sheet audit in modern business this text deals almost exclusively with the financial or balance sheet audit. However, it is believed that the information presented will enable an intelligent accountant to design working schedules suitable for other kinds of accounting work, for the balance sheet audit working forms are easily adaptable to a detailed audit or to an investigation. APPENDIX A shows how the working schedules would be prepared and arranged in the case of a *recurring* balance sheet audit, including the cross references, explanations and statements of work done with reference to each item appearing in the balance sheet and relative income statement. Ordinarily such information may be scheduled in a number of ways, and so additional exhibits are shown in a second appendix to illustrate how the information in APPENDIX A might have been scheduled differently. Certain labor-saving devices are also illustrated.

It is not intended that *Audit Working Papers* shall set forth the complete procedure of a balance sheet audit; however, in discussing the content of working papers it is necessary that the auditing procedure which is essential for their preparation shall be considered. The reader should study the volume in conjunction with the Federal Reserve Board bulletin, *Approved Methods for the Preparation of Balance Sheet Statements,* or other standard material. Used in addition to such text material it is believed

that *Audit Working Papers* will prove of very great assistance to the individual, or to the instructor for class use.

For the general practitioner and student a reading course on auditing has been included as a bibliography. This has been divided into twenty-five topics, with selected references on each. These topics may also be made the basis of a collegiate course, and it is believed that each subject will require at least two hours for lecture or discussion. The subjects of inventories, consolidated balance sheets, investigations and perhaps other topics may require two or more sessions. With a little ingenuity on the part of the instructor, and with the addition perhaps of a few discussions regarding the special points involved in the audit of certain specific kinds of business which are of importance in each community, these references are sufficient for an evening course of thirty two-hour lectures or for at least a sixty-hour course in auditing in a standard university school of commerce. Problems and additional practice material may be supplied, if desired, to supplement the text and exhibits.

The general bibliography on accounting and allied subjects has been prepared to meet the constant demand for such a list of books. It will prove particularly valuable, it is believed, to those younger men who are actively engaged in the practice of the profession, who have little time for reading and yet desire that broader knowledge of business which comes from such reading. Capital stock of no par value has become sufficiently important of itself to warrant a brief bibliography.

The author has spent the greater part of his productive life in academic work and has felt keenly the need of a book such as this. He believes it entirely proper, therefore, to express here his own appreciation of the willingness on the part of the firm with which he is now associated to permit the use of this material and to share with everyone interested in the profession of accountancy its experience over a long period of time. The author is solely responsible for the statements appearing in this volume, though the materials on which they are based are drawn from the experience of others extending over many years.

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INTRODUCTION

By Carl H. Nau

"And further, by these, my son, be admonished: of making many books there is no end: and much study is a weariness of the flesh."

These words were written thousands of years ago. What would the author of *Ecclesiastes* have said could he have envisioned the present output of the product made possible by the invention of Gutenberg? Compared to the literature of the other arts and sciences, most of the literature touching upon the subject of accounting is of comparatively recent origin. Nevertheless *The Accountants' Index* (also a publication of the Endowment Fund of The American Institute of Accountants) lists 1,578 pages of references to books, articles in periodicals or other examples of the printed word dealing with accountancy or related subjects. Doubtless, many books do not fill any real need, and were written to flatter the vanity of the author, to exploit some private interest, or were otherwise foisted upon a surfeited and ill-informed reading public.

The foregoing is said merely for the purpose of providing contrast and to emphasize my belief that Mr. Jackson's book fills a real need. Much has been written, both theoretical and practical, upon other phases of accounting and auditing technique but, except for a few incidental references to the subject in text-books and magazine articles, I know of no exhaustive nor authoritative exposition of this subject which is of such importance to the modern accounting organization as well as to the individual practitioner.

The Accountants' Index lists only three references to magazine articles (two appearing in The Journal of Accountancy and one in the Canadian Chartered Accountant) and it makes no reference whatever to a book upon this important technical branch of an auditor's work.

Having made the case for the need of an authoritative book upon the subject of *Audit Working Papers,* a word as to the ability and experience of the author to undertake the work of writing a book to fill this need may not be amiss.

If natural ability, thorough preliminary preparation, diligent study, broad practical experience and continued access to the laboratory and workshop of as highly organized and completely equipped an accounting organization as there is in this country will supply the qualifications for undertaking the preparation of this work, then the author may be deemed to possess the necessary qualifications.

This book, which fills a long-felt want, should be in the library of every accountant's office and be made available to every member of his staff. It should be read and studied by every student who is preparing himself to enter the public practice of accounting or auditing. It should be needless to say that every member of The American Institute of Accountants should own a copy.

Audit Working Papers is published by the American Institute of Accountants Foundation. The copyright has been donated and any profit resulting from sale of the book will accrue to the Institute. It is indeed fitting that a technical book of the character of *Audit Working Papers* should be published by an agency of the organized profession itself, instead of being published by a private profit-making undertaking and that the profits from its sale be used for the educational advancement of the profession instead of contributing to the income of private individuals.

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CHAPTER I

THE AUDITOR'S RECORDS*

Development of Accountancy

Accountancy as practised in the United States has had its greatest growth and its most remarkable development during the last twenty-five years. The general business recovery which followed the financial panic and business depression of the nineties was characterized by the formation of combinations and mergers of separate enterprises into larger units and furnished the first big impetus to the work of public accountancy. Out of this period, during which fundamental business principles seemingly were many times completely ignored, came many of our great corporations. Likewise, this impetus to business, bringing new and important work to the public accountant, resulted in the formation of new accounting firms and in a corresponding demand for technically trained and otherwise qualified staff assistants.

Such a period of unusual business and financial activity was naturally followed by one of inactivity, and for a year or two accounting was rather dull. But when, early in the twentieth century, there came about the investigation of the insurance companies and several of the largest accounting firms in the United States were assigned to make these investigations, the disclosures led to deductions as to possible conditions in other companies not generally supposed to be as highly respectable as the insurance companies. People for a time were naturally suspicious and auditing became more general. This was perhaps the immediate impetus to public accounting which led to the really great movement that is in progress today. The movement was due to come, however, and its continuance has been the result of the rapid increase of wealth and of the great development of business which accompanied it. It may be said by some that the war and the taxation that grew out of it were likewise new impulses but they were relatively of secondary importance.

* *Audit Working Papers, Their Preparation and Content* should be read in conjunction with the Federal Reserve Board bulletin *Approved Methods for the Preparation of Balance Sheet Statements* if the reader would acquire most completely the procedure of a balance sheet audit. This bulletin has been approved by the Council of the American Institute of Accountants and by the Federal Trade Commission and has been given tentative approval by the Federal Reserve Board. It may be obtained from the Government Printing Office, Washington, D. C., price 10 cents per copy.

Yet in a survey recently made it was found that of the corporations whose names appear in leading investment manuals only approximately six per cent. were recorded as having their accounts annually audited. No doubt other companies provide for the regular audit of their accounts and are merely not recorded as employing public accountants, but in any case the total percentage is comparatively small. When one considers that the practice of employing auditors is practically universal in England, he may imagine the possibilities in the United States in this direction alone; the additional growth which is possible in each of the various fields of accountancy is so extensive that the opportunities for development are practically what the accountants of the country make them.

If, therefore, the public accounting organizations of the United States are to operate on a large scale and are to serve their clients with the greatest degree of efficiency and success they themselves must possess a relatively high degree of system and organization. An important part of the work of the accountant is to criticize and to correct careless methods in others and to outline systematic methods for those businesses which do not possess such methods. The accountant, therefore, should convey the impression to his client that he appreciates order and good methods and he should be able to demonstrate this by exhibiting a high degree of perfection in planning the work of assistants on an assignment and in the preparation of his own working schedules and final report.

The Records of the Auditor

The report and occasionally the working records of the auditor constitute the only important materials which a client will have an opportunity to observe and the working papers which assistants make up in the office of the client should therefore be systematically and carefully prepared. Inasmuch as the working papers on an audit or on an investigation are the connecting link between the client's records and the auditor's report and form generally the sole evidence of the correctness of the report or certificate, it is of the utmost importance that these papers should give full information regarding the composition of all items in the accounts, together with the methods of verification adopted for each; also, that all questions raised during the examination and the settlement thereof, and in many cases notes of conversations with

officials, should be fully reported in the working papers. These records constitute the auditor's main defense in case of criticism of his work or findings. Therefore a complete record should be made of all work performed and of all conclusions reached on an engagement.

The beginner cannot be impressed too early in his accounting career with the importance of the form and content of his working papers. Many times it must be a matter of judgment on the part of the individual who is assigned to the work as to what information or data his papers shall contain, and he must learn to grasp a situation quickly and to determine what is to be the extent of the information which is to be included in his working schedules. If an older assistant is present the beginner, or the junior as he is ordinarily called, will be instructed concerning the general procedure which he is to follow and the information which he shall include in his working schedules. The junior must learn, however, to think these things out for himself for in all probability he is the only one having all the facts from which to judge the importance of the material.

Yet, before proceeding further it may be emphasized that some assistants include too little information in their working schedules, while others tend to record in their papers much more information than is needed. In the case of the beginner the tendency is to include a mass of data which are practically or entirely worthless, so far as the audit verification is concerned. As he increases in experience and better learns the audit procedure to be adopted, this tendency will decrease, occasionally to such an extent as to merit the remark recently made concerning an able auditor that the working papers he brought back to the office "consisted merely of what notes he could make on his shirt cuffs." Whatever is essential to explain or support any amount appearing in the balance sheet which is to be certified or reported upon or in the accompanying income statement, or whatever helps to determine the present financial condition of the business and the kind of certificate or report the auditor will be justified in giving, should be included in the working papers.

Ownership and Confidential Nature of Working Papers

The working papers or records are the sole property of the auditor and should remain in his possession. Not only are they

the connecting link between the auditor's report and the client's records, but the careful preservation of these papers not infrequently will eliminate the necessity of duplicate work, for which ordinarily a charge cannot and should not be made. The papers are highly confidential and access to them by outside parties, such as the client in the case or Government representatives, should be sanctioned only by a principal. In all cases where access is requested by any one other than the client the permission of the client must be obtained. A representative of the auditor should be present whenever a review of the working papers is thus allowed.

All working papers should be kept in a filing room and should not be given out except on a receipt from the assistant obtaining the papers. The receipt will, of course, be returned or destroyed when the working papers are returned to the filing room. Assistants should be held strictly responsible for all working papers in their possession or charge. Whenever office copies of papers of any kind are taken away from the office it is well to require the written consent of a principal, and all reports, books or other documents sent out of the office should be accompanied by a covering letter.

When working or other papers are taken out of the office they should be securely enclosed in wrapping paper or envelopes and either fastened or sealed. The name and address of the assistant should be legibly written on the parcel, so that if the papers are lost or mislaid they may be returned unopened to the assistant responsible for them.

Whenever assistants complete out-of-town assignments and are not themselves returning to the office to which they are attached they should immediately forward the working papers and should advise the office in sufficient detail to enable the tracing of the papers. This will best expedite the preparation of the report and the certification of the accounts for the client.

Working papers not only are valuable in preparing and certifying the current accounts but are quite frequently referred to for other purposes. This has been particularly true during recent years with reference to using the audit papers for assisting in the computation of invested capital for excess-profits-tax purposes. The working papers should therefore be preserved, and when no longer needed for current purposes should be properly stored.

As illustrated in Chapter XIII, these papers may prove valuable many years after the actual work is done and no working papers should be destroyed if it is at all possible to preserve and store them.

Types of Working Papers

The work of public accountants may be divided into several distinct and different groups, each of which possesses certain distinguishing characteristics or features and requires records or working schedules conforming to the purpose for which the work is done.

First of all there is the detailed or cash audit, ordinarily embracing a complete check of all cash transactions during the period under review. All cash receipts are accounted for and all cash disbursements are vouched. The journal entries are carefully scrutinized and the postings and footings are ascertained to have been made accurately and correctly. The detailed audit is used, ordinarily, when embezzlement is either to be guarded against or detected, when payroll and stores disbursements are to be verified in detail, or when a system of internal check does not provide adequately reasonable assurances that the detail work in the accounting and cashier's departments is carried out correctly. The working papers on such an audit consist largely of a statement of work done and a summary of the results obtained.

Then there are balance sheet audits, which will be discussed more in detail later, and an important branch of accounting known as investigations made with reference to the reorganization of companies, or for the purchase or sale of a business, or with regard to new issues of securities. Still another branch consists of the construction and installation or the revision of accounting systems and cost systems, while in recent years a new and very important branch has been created by the income-tax work. A still further branch which is rather special and will not ordinarily affect the younger and less experienced accountant is that of rate cases and of giving testimony with reference to litigations of various kinds. Lastly, there is a branch of general business advice, work with reference to receiverships, trusteeships, executorships, etc., including the preparation of the accounts for these matters, and miscellaneous general work. The information desired in each of these kinds of work would differ somewhat or entirely

from all the others, and the schedules would be prepared accordingly.

The Balance Sheet Audit

It is not possible in a treatise of this kind to discuss the form and content of the working papers which would be prepared in the case of each of these various branches of accounting and it will be the purpose of this volume to discuss and outline only the working schedules which should be prepared in the case of a balance sheet audit. It is believed, however, that the present outline will be adequate to enable an intelligent accountant to design working schedules suitable for other audits or investigations.

The term "balance sheet audit" is one that has grown up almost exclusively in the United States and until quite recently was practically unknown in England. Even today in important audits a great deal more of detail checking work is done in the case of the English audit than is done in the United States. This perhaps is true largely because of the size of the business units in the United States and because of the existence of elaborate internal organization of such companies. The more complete the internal organization the greater are the protections against possible fraud and inaccuracy, and thereby the need for detailed audits by outside accountants becomes proportionately less. The reader should understand from the beginning that *the ordinary procedure of a balance sheet audit is adequate only when the auditor can satisfy himself of the sufficiency of the system of internal check — which in combination with a balance sheet audit and reasonable tests will afford substantial protection to the client against the risk of defalcations.*

The balance sheet audit as it grew up in the United States was largely what leading accounting firms made it. There has been considerable doubt on the part of many leading accountants as to just what the responsibilities of an auditor are when undertaking a balance sheet audit, but that question has been partly or largely determined by the Federal Reserve Board in its bulletin entitled *Approved Methods for the Preparation of Balance Sheet Statements.* This was the first document of the kind to be issued under the auspices of anyone other than public accountants and it is estimated therein that in the United States under present practice probably more than 90 per cent. of all statements certified by public accountants represent balance sheet audits.

Because of the fact that the Federal Reserve Board has outlined and defined the responsibility of the public accountant in the conduct of a balance sheet audit, *Approved Methods for the Preparation of Balance Sheet Statements* becomes of very great importance and should be in the possession of and thoroughly mastered by every accountant and by every student who is ambitious to become an accountant. The American Institute of Accountants, through the approval by its council of this bulletin, has in effect taken the position that every accountant is in duty bound to make his audit equal in standard to that laid down by the Federal Reserve Board. While this is a very important situation for the accountant to bear in mind it is also very helpful in that the auditor may say to his client, who may object to certain procedure which the auditor feels bound to follow, that the Federal Reserve Board has outlined certain procedure as standard and that each accountant is expected to live up to that standard which the Federal Reserve Board and the recognized accountants of the country believe to be necessary. The schedules as prepared in APPENDIX A and the procedure outlined in this volume are in accordance with the rules of standard procedure laid down in the Federal Reserve Board bulletin.

Whenever a balance sheet audit is made *it is very desirable that the audit papers should contain a certificate from the accountant in charge that he has satisfied himself as to the adequacy of the system of internal check and also a statement of just what test checking has been carried out.* This will not only better enable the principal to know whether the ordinary procedure of a balance sheet audit is sufficient verification or not, but it will cause the assistant in charge of the audit to exercise greater care than if no such thorough investigation of the system of internal audit be made. Such an inquiry by the senior assistant serves as a logical starting-point for the audit.

Beginning the Audit

In preparation for beginning the audit the accountant in charge before leaving the office should read the correspondence in the case and should ascertain carefully the scope of the audit and the period to be covered. He should obtain the program or outline of the work to be done and should determine the amount of detail checking which will probably be necessary. He should

carefully inspect preceding reports, if any have been made, and should take with him the working papers for the last previous audit, if any.

If the audit is being made for the first time, permanent file papers should be prepared. These will include a list, by name and number, together with a brief description, of the books used by the company; also the names of officers and chief employees and a statement of the relation of the various officers and senior employees of the accounting department to the treasurer, purchasing agent, chief engineer and similar officers. The assistant in charge should make a general survey of the accounting methods employed and should satisfy himself as to the sufficiency of the system of internal check. All of this information should not only be kept in a separate file but should be kept up to date by noting therein any changes from period to period.

For the guidance of somewhat inexperienced assistants the following suggestions may be of value:

When assigned to a case, the auditor in charge should obtain a letter of introduction, and either he or a junior assigned to him should procure a supply of stamped return envelopes, bank certificate blanks, analysis paper, pencils, clips, rubber bands, erasers, etc., time and expense sheets, together with the audit program and the working papers of the last previous audit, if any. He should consult with the partner or whoever is supervising the work in regard to any special features which might modify the general instructions given for the conduct of the audit.

When assigned to an out-of-town case, the assistant should advise the office of his hotel address immediately upon his arrival at the destination. During his absence he should mail promptly to the office to which he is attached the time and expense reports on the evenings of the days when they are due.

Upon arrival at the client's office, a junior assistant, if any be present, should be assigned to make the cash count* and to prepare the reconciliations of bank balances, while the accountant in charge should obtain or proceed to take off a trial balance of the company's general ledger, ascertaining before doing so whether the closing inventory and other closing entries have been made.

*It is not uncommon in the case of recurring balance sheet audits for the auditor to be present and to count the cash, notes receivable and securities at the close of the fiscal period and then to return some weeks later, when the client has had time to close his accounts, and proceed with the audit.

The totals of all schedules prepared during the audit should agree with or be adjusted to the balances appearing in this general ledger trial balance.

The assistant should not hesitate to write, whenever necessary, to the office to which he is attached for information or guidance. All communications, ordinarily, should be addressed to the organization and not to any individual.

In all instances the assistant should endeavor to complete each schedule before taking up another one. If this procedure is followed, the assistant preparing the schedule will obtain a much clearer and more complete grasp of the subject matter of the inquiry than would be possible where an effort is being made to carry on simultaneously investigations into two or more balance sheet items. In addition, it will greatly facilitate the work of the auditor in charge when he has an opportunity to review the schedules if all working sheets submitted to him are completed so far as instructions have been given.

When a schedule is set aside as completed the auditor should be able to know that all instructions have been complied with unless reasons for not following them are noted thereon. Each schedule should bear a brief though complete statement of all work done with respect to the verification of the item, and each schedule should be initialed by the individual doing the work.

The Working Supplies

One of the first considerations in beginning the work of an audit is that of the supplies which are needed. The auditor with a complete supply of materials will obviously have the respect of his client to a greater degree than the accountant who is not so supplied with analysis paper, fountain pens for both black and red ink, pencils, clips, erasers, etc. There may be some difference of opinion regarding the number of kinds of working paper which it is necessary or desirable to have, but ordinarily the fewer the kinds of working paper and other supplies which the auditor possesses the better. It is even suggested that only one kind of working paper be used. An example of a very satisfactory working paper is shown as Exhibit *1*, APPENDIX B. It consists of ordinary fourteen-column analysis paper of good quality and medium weight. The size is 17 x 13 inches and it may be ruled in the colors shown or as preferred by the user.

No unit ruling is needed. The sheets may be made up into pads, but preferably are folded together in the center, five or six sheets to the bunch.

While many styles of working paper may be used if desired, one style of uniform size and ruling will be found convenient for preparing all working exhibits. Where single sheets only are needed the fourteen-column sheets may be torn in half, yet when the large sheets are properly folded all schedules will be uniform in size for the purpose of binding the numerous working sheets. In addition to being more convenient it is usually cheaper to use one instead of several kinds of analysis paper.

The most important thing, perhaps, is that the auditor or the assistant should have a plenteous supply of whatever kind of working paper he may use. Separate sheets should be used for each memorandum, even though it may require only a line or two across the top of the page. Paper is comparatively cheap even at present prices, very much cheaper than the time required to look through a large set of working papers to find an essential item of information merely because the assistant who prepared the schedule included two or more unrelated memoranda on a single page. Likewise, writing on the back of a sheet may easily be overlooked; assistants should always use one side of the paper only. All schedules should invariably be prepared in ink.

Superscribing the Schedules

All working schedules prepared on an audit should have the name of the client or business written or rubber stamped at the top of each sheet, and each sheet or set of sheets dealing with any matter should also have the name of the account or matter investigated written or rubber stamped at the top of the sheet immediately below the name of the client or business. If the reader will turn to APPENDIX A he may observe the ordinary procedure in superscribing the working schedules.

When an engagement is comparatively small or when a small set of working papers is being prepared it may seem unnecessary to the casual reader to take the trouble and time to superscribe each sheet. The amount of information which is written on a single schedule may likewise appear unimportant but later developments may make that item of very great importance, and it is essential on any audit, however large or small it may be, that

any information worth preserving be readily available. Furthermore, when it is realized that in large organizations several score or hundred engagements may be in progress at one time and also that there may be on a single engagement thousands of separate schedules and sub-schedules the necessity for having each exhibit superscribed and clearly marked becomes at once apparent.

Permanent File Papers

The working papers for a balance sheet audit may ordinarily be grouped as permanent file papers and current file papers. The permanent file papers should include all information, records, etc., which may be used for successive audits as distinguished from the next succeeding audit only.

In the case of a first audit the accountant should usually prepare a list of the books, records, and other important data which would be presented to him during the course of the audit. This list should include the name and number by which each record is known and identified, and usually notes should be made concerning the purpose and relation of each of these records to all other records. The auditor's working sheets should also indicate by whose authority entries are made in the books and by whom cheques and vouchers of all kinds are signed and approved. The names of officers and chief employees, and the relation of the various officers and senior employees of the accounting department to the treasurer, purchasing agent, chief engineer, etc., should also be obtained and included in the permanent file papers. It is also desirable, if possible, to include in these papers the signatures or initials used by various individuals in the approval of vouchers or other papers. Thus, in the case of one large engagement, at least four copies of the names and signatures of those authorized to approve vouchers were obtained for the use of assistants. Upon each sheet were typewritten the names of the individuals authorized to approve vouchers or other papers; the approvals which each individual could make were designated, and opposite each name appeared the signature or initials written by the individual himself as written when making approvals.

A rather complete survey of the accounting system and methods should be made and notes thereon should be included in the permanent file. Such information should be reviewed from year to year and kept strictly up to date. Any changes in the accounting

methods or in the methods of authorization, etc., should be carefully noted from period to period and appropriate comments should be made in the permanent file working papers. A statement from the accountant in charge that he had satisfied himself of the sufficiency of the system of internal audit, indicating specifically what he had done to determine whether or not the internal audit was sufficient, should also be included.

The permanent file papers should contain further the program of audit, if such be prepared and used, and all other papers having value for purposes of later audits. These latter papers may include abstracts from or copies of the articles of incorporation, by-laws, trust indentures, partnership or other agreements, particulars regarding the original issue of capital stock and the valuation of properties, franchises, good-will, trade-marks and copyrights, etc., excerpts from corporation minutes which affect more than the current operations or the period under audit and similar material.

The Audit Program

The general principles which underlie all audits will serve, in a general way, as a working program for the audit of any type of business. Yet a knowledge of how special kinds of business actually operate is essential to the successful auditor for it is well known that in many kinds of business there are special methods or knotty problems not found in other types of business. It is desirable, also, that some definite record be kept of the work performed on each audit in order to insure relative uniformity and to be certain that nothing essential is forgotten. It is therefore common, as previously stated, to prepare a program or outline of work to be done on a particular assignment and then to have all assistants engaged on the work initial the portion of work which they do or record the time taken. The audit program is not used extensively by some firms, but where it is used a glance at the program informs the auditor of the progress of the work. In case of errors the responsibility therefor may be more easily placed, and, likewise, credit may be given for good work done.

The first program cannot be prepared too definitely in advance and only after the auditor actually takes up the engagement should he attempt to complete his program of work. Care should be taken also to see that the audit program is revised from

year to year, the revision to be based upon the experience of those who were engaged on the audit, in order to give effect to changing conditions. When a program is used for several periods it is often prepared in the form of a columnar sheet with the details of the work to be done listed down the left side of the sheet, while the column headings to the right of the sheet record the closing dates of the respective periods to be audited (see Exhibit 5, APPENDIX B). As an assistant completes certain work he will place his initials in the column opposite the item he has completed. When certain parts of the audit, such as the inspection of vouchers, verification of footings, examination of books, checking of postings, etc., are limited to tests the work sheet should show specifically the periods covered and approximately the percentage of the items which were selected and examined.

As long as the audit is not permitted to become mechanical and the program is revised from period to period, there are advantages in the use of an audit program. However, the use of such a program must not be allowed to replace alertness and efficiency on the part of the assistants engaged on the work, for there is too often a tendency to work with little thought or ingenuity of their own. Perhaps the greatest need of the beginning assistant is that quality often spoken of as "judgment and common sense", for it is sadly true that many times such beginners possess practically no judgment in accounting matters.

As typical of the form of program for a recurring balance sheet audit the reader has been instructed to see Exhibit 5, APPENDIX B. Observe that in the case of cash the last month only of the fiscal period is chosen for the verification, the accountant in charge having satisfied himself that the internal bookkeeping is sufficient reasonably to guard against misappropriation of the funds of the company. This would not necessarily serve as a model to be followed in the conduct of every balance sheet audit but it represents such a program for a specific business. This program would probably be revised somewhat before the next audit of the company; in many cases no program at all would be used. All that is essential is that certain specific information be obtained and definite verifications be made so that the auditor may be reasonably certain of the accuracy of the accounts and sure that he is justified in giving a certified statement. Any program of audit is valuable only in so far as it guides in the verification and thus assists in

preparing the schedules which are necessary to accomplish the purpose of the audit.

Current File Working Papers

The current file working papers in the case of a balance sheet audit are prepared to verify and to support each item appearing in the balance sheet and accompanying income statement. As it is the purpose of this treatise to discuss in detail these schedules, together with their preparation, no detail discussion of procedure will be given at this time. The reader should, however, study Appendix A and should observe that the primary purpose of such working papers is to verify the items appearing in the balance sheet and the accompanying income statement. The leading schedules in the current file papers, particularly in the case of a recurring audit, will usually show the closing balance per the previous period's audit papers, and should show in summary the changes or adjustments which are necessary to produce the figures appearing in the current final statements. The leading schedules, as illustrated in Appendix A, are prepared in comparative form and are supported by such subsidiary schedules as are necessary.

All adjustments made during the progress of the audit should ordinarily be prepared in the form of journal entries with the same care as to explanations that the auditor would use if the entries were being prepared for the client's books. These entries should be numbered consecutively and separate records should be kept (*a*) of those entries actually taken up in the books by the client and (*b*) of those made to reconcile the balances of the books of account as shown by the client's ledger and the accounts as adjusted by the auditor. These may represent either reclassifications which need not be taken up in the accounts or adjustments which the client does not adopt and therefore are not taken up in the accounts. It may be repeated that the auditor should include in his working papers all matters that come to his attention which have any essential bearing upon the audit. His records should be complete not only as to the figures in the client's books but also as to the methods of verification adopted by him, and they should include a full statement of work done and of his own conclusions or deductions reached while engaged on or as a result of the work. So complete a record of the audit engagement is of value not only to the auditor himself while

the work is in progress and after its completion, but it is absolutely essential to the principal who must judge of the sufficiency of the verification as a basis for certifying the accounts, or to anyone else who may have occasion to look through the audit papers with reference to the next audit or to taxation or any other matter.

Arrangement of Current Working Papers

Ordinarily in the case of a mercantile or industrial balance sheet audit the complete working papers for the current engagement would contain the following and the papers should be arranged approximately in the order shown:—

(A) Draft of report to client (when such report is given);
(B) Draft of balance sheet and income statement for client;
(C) Draft of other exhibits for client;
(D) Special notes or instructions regarding the next periodical audit;
(E) Working trial balance or working balance sheet and income statement (or both) properly indexed;
(F) Adjusting journal entries numbered and subdivided to show those entries which were recorded in the client's books of account, and separately those additional entries which were necessary to reconcile the client's books with the accounts as adjusted by the auditor but were not taken up in the client's books;
(G) Leading and supporting schedules for assets, liabilities, the capital accounts, and for the income accounts, which are necessary to support the amounts appearing in the final statements to the client;
(H) Miscellaneous papers, including corporation minutes, comments of the auditor, tax matters, etc. In case the correspondence is included in the current working file it also would be filed in this portion of the working papers, though preferably a separate correspondence file should be kept; and
(I) "Superseded" working papers.

The client's drafts may be bound by themselves and this probably would be done in the case of a large audit with voluminous working papers. Also where the business is large the working income statement and its supporting schedules and working papers

may be bound separately. If the working trial balance is used the supporting income and expenditure schedules and working papers may still be bound separately and merely be cross-indexed to the working trial balance. It is not unusual in practice for an audit to be so large that separate sets of working papers are necessary for inventories, for bond issues, for cash, and perhaps for other items appearing in the final statements. In some cases the inventory schedules alone may comprise hundreds or thousands of sheets and be bound up into a number of separate sets of papers. Regardless, however, of the portion of the audit working papers which are specifically bound into one set or group of sets the complete working papers would still maintain the general relations to each other which have been outlined above.

Another somewhat similar method of arranging working papers relative to a balance sheet audit, particularly applicable to medium-size or large organizations, is as follows: —

(A) The final draft of the report or certificate and exhibits (attached to the file after being used for typing).

(B) Special notes regarding the next periodical audit.

(C) Index to the working papers (only when the papers are not arranged according to some definite standard).

(D) Working balance sheet indexed and arranged in columns as follows: —

- (i) Auditor's figures per previous audit.
- (ii) Captions.
- (iii) Trial balance segregations (marshalling the items in the trial balance after closing under their respective balance sheet captions).
- (iv) Balance sheet figures as presented by the company or as per books (being the totals of the groups in previous column (iii)).
- (v) Auditor's adjustments debit and credit (posted from E).
- (vi) Amended or final balance sheet figures.

(E) Adjusting journal entries numbered and divided as to:

- (i) Adjustments adopted by client and entered in the accounts subsequent to the commencement of the audit and the date of preparing the trial balance.
- (ii) Balance sheet rearrangements and reclassifications (which need not be taken up in the accounts).

(iii) Adjustments which are not adopted by the client.

(F) Trial balance showing:—
- (i) Balances after closing at the end of the previous audit period.
- (ii) Balances after closing at the end of the present audit period, or balances before closing at the end of the present audit period when the following are added:
  - (a) Trial balance items which are closed into the profit and loss account.
  - (b) Trial balance items which are carried to the balance sheet.
- (iii) Indices used in tracing items to balance sheet captions (see Diii).

(G) Schedules supporting the assets, liabilities and capital items appearing in the balance sheet (in their order in the balance sheet) and indexed according to a standard plan.

(H) Schedules supporting the income statement items and indexed according to a standard plan.

(J) Excerpts from the minutes of the directors and of the stockholders for the current year which are not of the nature to be included in the permanent file working papers.

(K) Superseded drafts of final exhibits.

(L) Superseded schedules and miscellaneous papers.

Conclusion

These papers, as previously stated, are usually the sole evidence of the work done on the audit and of the correctness of the report or of the certificate, and too great care cannot be taken to make all working schedules intelligible and complete. The writing should be legible, and should be done with ink. Particular care should be taken to see that all names are correctly spelled. It seems almost unnecessary to say that figures must be neat, and every care should be taken to see that the papers are usable and that they set forth exactly the information which is essential to the audit. Yet, the work must be done quickly and should facilitate in every way the completion of the audit and the preparation of the certified accounts for the client.

CHAPTER II

Indexing and Filing the Working Papers

Standardization in Working Papers

Standardization in the form and content of working papers does not limit an auditor's initiative in presenting facts or in obtaining information in excess of the minimum required. It serves merely as a directing influence to make the work of an individual assistant more intelligible to others who must also use the information obtained, and it should increase, rather than diminish, the efficiency of the individual. Standardization in accounting or auditing procedure, as in other well-organized agencies, usually represents the best thought and broadest experience in the organization where such methods are used, and ordinarily no one individual could evolve practices as good as those which have become standard usage.

The greatest value to be derived from standardized working papers is the advantage arising from the ability of one assistant to take up immediately and without loss of time the papers prepared by another assistant and to continue the work. In the larger accounting organizations this is very important, for not uncommonly four or five or more offices assist on a single audit. The papers when assembled by the individual offices are usually sent to the office auditing the head-office accounts of the client, and there the auditor in charge of the work assembles the figures and prepares the schedules for the final statements or reports. The confusion that would arise in every important audit from a heterogeneous mass of such working papers, and where some uniform method in their preparation had not been adopted, is almost beyond comprehension. As a practical matter, such papers would be unintelligible, and the work of the assistants who prepared them would be largely or entirely wasted. Standardization does not mean inflexibility, but, on the contrary, it means adherence to certain well-defined principles and the sensible application of those principles to conditions affecting individual cases. Standardization in auditing procedure, in the preparation of working schedules

and in the indexing and filing of the working papers thus should be of primary assistance to the staff accountant and it is of inestimable value to the organization with which he is affiliated.

General Filing

Along with the filing of working papers each accounting office should have a definite system of filing correspondence and the duplicate reports and certified statements prepared for clients, in order that all material may be readily accessible and quickly available. Occasionally the correspondence regarding a specific engagement will be filed with the working papers for that engagement, but the more satisfactory way is to keep separate correspondence files for correspondence and for duplicate reports, which may be cross-indexed to the working papers. All information regarding an engagement, whether it be filed in the correspondence file, in the report file or in the working papers file, while highly confidential is thus easily available to those entitled to it.

There are many readily usable and well-known methods of filing correspondence and it is not the intent here to give a long discussion of them. However, it may be proper to describe briefly a comparatively simple system which is satisfactory for a medium-size or small office, and is equally adaptable to a large office.

Correspondence

A small card, 3 x 5 inches, should be prepared by the filing department for each correspondent. On this card is recorded the name of the correspondent, a consecutive number, information as to the names of officers or other individuals of the correspondent who are associated with the correspondence, the partners and chief assistants of the accounting firm who are interested in that client, and any other information appertaining thereto. These cards are filed alphabetically and may be kept in an ordinary index file.

An ordinary correspondence folder is then prepared and this folder, which would contain the correspondence with one or more clients, is given a consecutive number and is cross-indexed to the alphabetical index cards just described. On the outside of the folder will be written the number assigned to the correspondent, and for each client the date on which the correspondence in that folder begins and the date on which it ends, that is, the date when a new folder is started. Because of its simplicity this method of

filing correspondence is entirely satisfactory for the small or medium-size accounting firm, while its capacity for expansion makes it also desirable for the larger office.

Working Papers

For filing purposes the working papers are given the same number as that assigned to the correspondence folder for the same client, which, as described above, is recorded on the small alphabetical index card. In case there are no working papers to correspond to the index card or to the letter file the filing clerk merely notes "no working papers" on the outside of the letter folder.

The working papers, both the permanent file papers and the current file papers, should be placed in substantial folders and for this purpose a red fiberoid envelope 10 x 15 inches in size is, perhaps, the most satisfactory. On the outside of the envelope should be written the name of the client and the nature of the work, as, for illustration:

North American Shipbuilding Company
Annual Audit, December 31, 1922

In the upper right-hand corner of the red fiberoid envelope should be written the same number as that which appears on the correspondence folder and on the alphabetical index card, and after this number should be written a dash and the year for which the work is done. Thus, if the North American Shipbuilding Company had correspondence file No. *3,382*, the audit file for that company for the year 1922 would bear the number *3,382–22.* If at any time it is desired to obtain information concerning the North American Shipbuilding Company all that is necessary is for the filing clerk to turn to the alphabetical card index for that company's number (in case the file number is not remembered) and then to the numerically indexed correspondence file or working papers file. This is a simple though entirely satisfactory method of filing working papers, for it not only makes the working papers themselves easily and quickly accessible but also makes immediately available all correspondence relating thereto. Yet if the correspondence alone is desired, or if the working papers only are wanted, either may be obtained without the other.

Report Files

Duplicate copies of the reports and certified accounts rendered to clients should be kept in a third file bearing ordinarily a separate

and distinct classification. The method of indexing would be similar to that already explained for the correspondence, namely, a small card would be prepared for each client, on which would be written the name and address of the client and, for explanation, the nature and the dates of the statements or reports rendered. A satisfactory method is to number all reports and certified accounts consecutively. In that case they could not be filed either with the correspondence or with the working papers because each year's report would bear a number different from the previous report, while, as explained above, the working papers files would bear the same number from year to year, the only change being to designate the period for which the work was done.

The reports, under such a scheme, would be numbered consecutively and would be filed numerically. The card index would be arranged alphabetically and thus immediate reference could be made to any report desired. Because many reports may be listed on a single card, it is well to use a card 4 x 6 inches for the alphabetical report file instead of the smaller card suggested for the correspondence file. Thus, a single client's card may have listed on it the numbers and dates of the certified accounts and audit reports for a number of years, though each report or certified financial statement would bear a number different from all the others.

Usually the head office, in case an accounting organization has offices in more than one city, will receive copies of all reports rendered by branch offices. These duplicate reports from branch offices may be filed with the reports rendered by the head office, though ordinarily they will be differentiated by prefixing to the number a designating letter. A separate letter may be used for each branch or a single letter may be used for all branch offices, thus merely designating the report as an out-of-town report.

Indexing and Filing Working Papers

Subject to special instructions in the office to which an assistant is attached a uniform method of indexing and filing working papers should be adopted by all the offices of an accounting organization. The working schedules should be arranged in the order of the items in the balance sheet and in the profit and loss account, the schedules supporting the items on the asset side of the balance sheet to be followed by those supporting the liabilities and the profit and loss items.

Each item in the trial balance should ordinarily be numbered and, in addition, should have marked thereon the reference or index letter of the balance sheet or of the profit and loss account. The individual schedules should be indexed to the balance sheet, to the trial balance, to adjusting journal entries, and should show clearly the composition of all amounts as entered in the summary schedules and appearing in the balance sheet or profit and loss account.

It is not always possible in practice to cross-index each item in the trial balance to the balance sheet, for sometimes a trial balance item must be divided between two or more balance sheet accounts or profit and loss accounts. When a single interest account is kept, for illustration, a part of it may represent interest payable accrued and in the balance sheet be included with Accounts Payable; a portion may be included with Accounts Receivable as interest receivable accrued; while probably the greater portion of the account will represent interest expense or income and will be carried into the profit and loss account.

Any one of several satisfactory methods may be adopted for indexing the balance sheet and income accounts. A number of these methods will be described, but the method which is perhaps easiest and is very satisfactory is to use single letters of the alphabet to index items on the asset side of the balance sheet and double letters of the alphabet for the liability and the income statement accounts. This is the method illustrated in APPENDIX A and is preferable because sometimes the number of items appearing in the balance sheet are in excess of the number of letters in the alphabet, and instances have occurred in the case of large railroad and similar audits where one side of the balance sheet alone has more than exhausted the alphabet. The auditor in charge, however, should prepare a rough balance sheet as soon as possible after taking up an engagement, in order that a general view of the ensemble may be obtained and that the working schedules may be properly marked with the index letter applicable to each as quickly as the individual schedules are completed.

In each case the indexing should begin with the first letter of the alphabet. Thus, in the first form of balance sheet shown in APPENDIX A, which is the form used by the majority of the large corporations of the country, *A* would represent *property and plant* and *AA* would represent *capital stock.* Subsidiary or supporting schedules should be numbered *A1, A2, A3, B1, B2, B3, AA1, AA2,*

etc. Each important schedule or item should be cross-indexed to all schedules it supports or affects, so that any item or amount may be easily and quickly found; unless the system of indexing does this it will have been largely without avail. The profit and loss schedules and sub-schedules should be designated by the same letters that are used to indicate the net profit or loss for the year or the surplus account in the balance sheet. For purposes of indexing, the reserve for depreciation and the reserve for bad debts may be indexed, if desired, with the assets from which the respective reserves are deducted. In case the reserves are so indexed, the supporting papers or working schedules for each should be marked with the next available letter of the alphabet and should be filed immediately following the property schedules and the accounts receivable schedules, respectively. In practice, however, the working schedules for the reserve for depreciation and for the reserve for bad debts are ordinarily filed among the miscellaneous reserve papers and are indexed as illustrated in APPENDIX A.

It is preferable, because ordinarily of the volume of papers necessary to verify each item, to use separate index letters in referring to inventories, notes receivable, accounts receivable, cash, etc., rather than to use a single letter for the entire group of current assets. The same is true of current liabilities. Furthermore, except where special directions are given to do so in case of the audit of a group of affiliated companies, or in some similar circumstance, it is not the practice in most offices to have the same letter always represent the same account; for illustration, *K* to represent *Cash*, or *SS* to indicate *Surplus*, for the accounts and accompanying papers will vary too greatly on different engagements. *For each set of working papers the indexing should begin with A and AA, respectively, and continue as far down the alphabet as is necessary to complete the items appearing in the balance sheet.*

Each schedule or sub-schedule should have written in the upper right-hand corner the index reference, that is, *A*, *A1*, *A2*, etc. There should also be indicated on each working sheet, below the final figure for which the schedule has been prepared, the balance sheet item or other schedule which the figure supports and for which it was prepared, that is, on sheets *A1*, *A2*, *A3*, etc., the reference probably would be *To A*. The importance of cross-indexing and the opportunity it affords for observing and checking the various interlocking parts of the accounts can not be over-

emphasized. Where several different funds or issues of securities, notes, etc., are verified by a single certificate or letter of confirmation, or in case of transfers of plant or other items between different plants or branches or affiliated companies the cross-indexing should be very thoroughly done. The index and cross-reference letters are ordinarily written in red ink in order that they may be more easily and quickly seen. A careful study of APPENDIX A should be made to understand clearly the process of cross-indexing which has been thus briefly described.

The working schedules or sub-schedules should also be cross-indexed to the adjusting journal entries and to special matters or amounts dealt with in the text of the draft report. This latter may prove of great benefit, for not uncommonly it is difficult to judge where to look for further information concerning such items.

In case of corporations owning or controlling other companies it may be desired to designate separately the several companies making up the combination, and this may be done quite easily. Thus, *C* may represent the consolidated or holding company papers, *I* the first individual company, *II* the second company, etc. In indexing the papers, the consolidated property and plant account, for illustration, would be designated by

$$\frac{C}{A}, \quad \frac{C}{A\text{–}1}, \quad \frac{C}{A\text{–}2}, \text{ etc.}$$

while the subsidiary companies' papers would be marked

$$\frac{I}{A}, \quad \frac{I}{A\text{–}1}, \quad \frac{II}{A}, \quad \frac{II}{A\text{–}1}, \quad \frac{III}{A}, \quad \frac{III}{A\text{–}1}, \text{ etc.}$$

This method is being used in a number of cases, the numerator of the index figure indicating the company, while the denominator denotes the various balance sheet and income statement accounts for each one, as already explained.

A full statement of work done should always be prepared and should be made a part of the schedule or included in the group of schedules to which it refers—that is, a statement of the work done on Cash would be included and indexed with the cash schedules (see APPENDIX A, Schedules *H–4* and *H–5*). All sundry working papers, such as excerpts from minutes, memoranda regarding mortgages, leases, contracts, partnership agreements, etc., when not referring specifically to the balance sheet or profit and loss account schedules, and when not placed in a permanent file, should

be gathered together, and should be placed after the other working schedules and before the "superseded papers." Such sundry papers, if quite extensive in volume, may be paged with Arabic numerals and should be prefaced by a sheet marked "Miscellaneous Papers Index", on which should be listed all the miscellaneous papers, together with the page reference for each. If few in number such papers may be given a designating letter similar to other working schedules (see *MM* to *MM-2*, Appendix A). "Superseded" papers should not be destroyed but should be placed at the end of the working papers, after the miscellaneous group.

Audit of Affiliated Companies

Although, as stated above, it is usually desirable in each set of working papers that the indexing shall begin with *A* and *AA*, respectively, and continue as far down the alphabet as is necessary to complete the items appearing in the balance sheet, it sometimes becomes desirable to establish a definite table or chart by which a given letter will represent a corresponding item in the balance sheet. This is particularly true in the case of audits wherein a number of offices will take part and the verification of a large number of companies or branches will probably be involved. Some uniform method of indexing the various schedules and working sheets in such a case enables the auditor in charge of the whole assignment to assemble the material from the various offices for use in the preparation or ultimate verification of the accounts, whereas the absence of such a method might cause confusion. Thus, in the case of an audit in which four or five offices participated and which involved the consolidation of between thirty and forty separate companies, the following method of indexing the working papers was adopted and was applied uniformly to the accounts of all companies making up the consolidation, viz.:—

Assets

A Property and Plant
B Special Funds on Deposit with Trustees
C Insurance Fund Assets
D Stocks and Sundry Securities (permanent investments)
E Inventories
F Accounts and Notes Receivable
G Sundry Marketable Securities (Liberty bonds, etc.)
H Cash in Banks and on Hand

K Cash on Deposit for Coupons Payable
M Deferred Charges to Operations
Z Intercompany Accounts (both debit and credit)

Liabilities

AA Capital Stock
BB Funded Indebtedness
CC Mortgages Payable
DD Notes Payable
EE Accounts Payable
FF Bond Interest Accrued
GG Coupons Payable
HH Advance Payments on Contracts (Intercompany)
JJ Reserve for Contingencies, and Sundry Reserves
PP Reserves for Depreciation and Depletion
RR Provision for Federal Taxes
SS Surplus, and the Profit and Loss Schedules
ZZ Corporation Minutes

If in using the above method some of the companies did not have certain of these items appearing in their accounts, the corresponding references were omitted from the working papers of that company. Thus, for illustration, assume a certain company had no "special funds on deposit with trustees" and no "insurance fund assets"—there simply would be no schedules *B* or *C* in the working papers of that subsidiary. In fact, the working papers for some of the smaller subsidiaries consisted only of schedules *E*, *F*, *H*, *Z*, *AA*, and *SS*, while in one case, the subsidiary being in process of liquidation, the working schedules were represented merely by *Z* and *AA*.

Uniform Indexing

Instead of adopting the first method of indexing outlined above some accountants prefer to use a method by which a given letter always represents a definite asset or liability appearing in the balance sheet. One such scheme which is quite simple and which may be used with success is the following:—

Capital Assets (and depreciation reserves) . .	*A*	Capital Stock	*AA*
Permanent Investments	*B*	Funded Indebtedness	*BB*
Inventories	*C*	Notes Payable	*CC*
Accounts Receivable (and reserve for bad debts)	*D*	Accounts Payable . .	*DD*
Due from Employees .	*E*	Due to Employees . .	*EE*
Notes Receivable . . .	*F*	Provision for Federal Taxes	*FF*
Marketable Investments (Liberty Bonds, etc.)	*H*	Accrued Interest, Taxes, etc.	*JJ*
Cash	*K*	Dividends Payable . .	*LL*
Deferred Charges . .	*P*	Reserves (other than bad debts and depreciation)	*RR*
Due from Branches . .	*X*	Surplus	*SS*
Intercompany Balances	*Z*	Profit and Loss . . .	*TT*
		Due to Branches . .	*XX*
		Corporation Minutes	*ZZ*

These symbols may quite easily be arranged to suit the needs of individual offices, and, by leaving occasional gaps in the letters, proper provision may be made for unusual items.

Uniform Indexing with Single Letters Only

As typical of another uniform method of indexing working papers, in which single letters are used for both asset and liability schedules and in which a given letter always represents specific accounts in the balance sheet and income statement, the following is submitted. This plan has been used for a number of years in some accounting offices and has given complete satisfaction.

A Cost of Properties

This account should include the cost of

Franchises
Real Estate
Plants
Roadways
Wells
Ships
*Equipment

* It will, of course, be dependent upon the nature of the company's business whether tools, etc., should be included herein or under the index initial *H*.

It will also be dependent upon the particular circumstances whether or not it is desirable to state this group in the Balance Sheet in one total or in more or less detail.

The work in progress should be segregated as between construction jobs for the company (which should be included herein) and jobs for outsiders which should be included under the index initial *H*.

Extraordinary Charges such as Interest during Construction, and Proportion of General Expenses
Incomplete Construction

B PROCEEDS OF BOND SALES TO BE USED FOR CONSTRUCTION EXPENDITURES

C ORGANIZATION EXPENSES, DISCOUNT ON CAPITAL STOCK SOLD, CAPITAL STOCK ISSUED AS A BONUS

Note: Where a Capital Surplus (*T*) exists it will probably be desirable, for balance sheet purposes, to close this account into it.

D TRUSTEES OF SINKING FUNDS

This will consist of investments in sinking funds under trust deeds and of cash in the possession of trustees.

E INVESTMENTS

Include hereunder investments in other companies' securities.

Note: A treasury bond represents merely a right, or medium, of creating a liability, and thereby acquiring an asset (not necessarily of an equal amount), and should not properly be considered itself as an asset.

G SPECIAL ACCOUNTS

Such an item would be "Deferred Payments on Land Sales."

H CURRENT ASSETS

Inventories of
- Company's product
- Ingredients
- Materials and supplies
- *Cattle or other live stock

Bills Receivable
Accounts Receivable (less Reserve for Doubtful Debts)

This will include—
(1) Work in progress for public
(2) Directors', officers', and employees' balances
(3) Municipal deposits, etc.
(4) Interest accrued on bills receivable

Cash in Banks and on Hand
Special items, such as coupon accounts, etc.

* The nature of the company's business would have to be considered to decide whether or not this should be included under *A*.

I DEFERRED CHARGES

Bond Discount and Expense
Taxes Paid in Advance
Insurance Unexpired
Interest Paid in Advance
Other deferred items

J CAPITAL STOCK
- Common Stock
- First Preferred
- Second Preferred

K SUBSCRIPTIONS TO CAPITAL STOCK
- Common Stock
- First Preferred
- Second Preferred

L BONDED DEBT
- Show each issue separately

N BORROWED SECURITIES OR CONTINGENT LIABILITIES
- Short-extended in Balance Sheet

O DEFERRED PAYMENTS ON STOCKS OF OTHER COMPANIES AND ON PROPERTIES PURCHASED
- On Stocks
- On Properties

Q CURRENT LIABILITIES
- Bills Payable
- Accounts and Wages Payable
- Deposits, such as contractors, employees, meters, etc.
- Interest Accrued but not Due
- Declared Dividends Payable
- Bank Overdrafts, less cash in hand
- Other Accounts

R SPECIAL ACCOUNTS
- Income received in advance of due date, etc.

S RESERVES
- Depreciation
- Casualty
- Insurance, etc.

T CAPITAL SURPLUS
- Assessments on Capital Stock
- Premium on Capital Stock and Surplus of consolidated companies over book cost of investments
- Capital Stock Donated to company

Discount on company's bonds acquired below par (except where discount is not carried as a deferred charge, when this should be credited to the amount charged off as discount on the year's sales of bonds)

Note: When this group (*T*) and also (*C*) are carried, for balance sheet purposes the one should be set off against the other.

U SURPLUS

	Balance from last account		....
V	Current Profit and Loss Account		....
	Extraordinary credits		....
	Total		....
	Deduct: Dividends paid	.....	
	Extraordinary charges	.....	....
	Balance		....

Note: A separate file will probably be necessary for the Profit and Loss schedules and should bear the initial *V*. The remaining items entering into the Surplus account will be indexed *U-1*, *U-2*, etc.

Still other methods of indexing current working papers will suggest themselves to the experienced auditor, but these serve to illustrate the process and tend to emphasize the necessity for adopting some definite method of indexing all current working exhibits. As previously stated, not only should the general indexing be carefully done but the cross-indexing of items appearing in one schedule to related items in other schedules is especially important because of the opportunity it affords for observing and checking the various interlocking parts of the accounts.

The Permanent File Papers

The "permanent file" papers, it has already been stated, should be kept separate from the current working papers and should include all papers which are of value for recurring audits, as distinguished from the next succeeding audit only. It will be found satisfactory to have these papers indexed by means of Arabic numerals, the papers being prefaced by a carefully prepared Index Sheet.

The Final Filing

After the working papers have been arranged in accordance with the balance sheet and profit and loss account items and have been carefully indexed and prepared for final filing, the junior should

punch the schedules in the upper left-hand corner and securely staple them together. The spike should be inserted with the points uppermost so as to permit the easy removal of the top papers or final statements for typing or for other use.

When the working schedules are more than eight and one-half inches wide they should be folded over forward to that width, and in the case of fourteen-column sheets two folds are necessary. First, fold the fourteen-column sheet forward to the center, and then fold the right half of the sheet again exactly in the center, folding the ruled columns *out*. When the right half of the sheet is now turned over on the left half of the schedule, the three extreme right-hand columns of the sheet will be uppermost (see APPENDIX A).

In folding working papers, the auditor's assistant should not fold the fourteen-column sheets in the center and then merely turn back the upper right-hand corner of the sheets, except possibly where these sheets contain a large amount of detail material which probably will never be required. This method is rather unsatisfactory for cross-referencing and prevents instant availability of figures desired. If possible, stiff linen backs should be placed at the front and back of the working papers to keep them from becoming soiled and torn.

The assistant should write on the linen back or other cover the name of the assignment and the nature of the work performed, as illustrated on the first photographed schedule shown in APPENDIX A. Not uncommonly a rubber-stamped imprint is also placed on the front cover, and the proper initials must appear on the working papers before they can be accepted by the filing room, viz.:

Date ______ (Date of work being done)

Arranged
and indexed ______ (Initials of assistant)

Approved
for filing ______ (Initials of principal)

After the working papers are indexed and securely stapled to-

gether place them in a strong fiberoid envelope for safe-keeping. Mark on the outside of the envelope the name of the client and the nature of the work done. Also write in the upper right-hand corner of the envelope the file number and date, as previously explained. Since, as previously stated, these papers usually are the sole evidence of work done and of the correctness of the report or certificate, too great care cannot be taken to make them easily usable by careful indexing and thoroughly protected against destruction and soiling. Yet one should remember that the work must be completed within reasonable time, and that the papers must set forth clearly and specifically all essential information needed for the verification and certification of the client's balance sheet and accompanying income account.

CHAPTER III

The Final Statements and the Working Sheets

Balance Sheet Audit Defined

In the words of the Federal Reserve Board Bulletin, "the scope of a balance sheet audit for a fiscal year or other operating period of an industrial or mercantile corporation or firm comprises a verification of the assets and liabilities, a general examination of the profit and loss account, and, incidental thereto, an examination of the essential features of the accounting."* After completing the discussion of the procedure involved in such an audit, the Bulletin adds, "if the auditor is satisfied that his audit has been complete and conforms to the general instructions of the Federal Reserve Board, and that the balance sheet and profit and loss statement are correct . . . ," he may give his certificate to the effect that the "balance sheet and statement of profit and loss . . . set forth the financial condition of the firm at .... and the results of its operations for the period."**

Purpose of a Balance Sheet Audit

The primary purpose of a balance sheet audit is the verification and the certification of the accounts of the client. These accounts, which ordinarily include not only the balance sheet but also the relative profit and loss account for the period ending at the date of the balance sheet, are of value particularly to proprietors and operating executives in ascertaining the real financial condition and current earnings of the enterprise, and, likewise, are of value to those who may be interested in the purchase of the company's securities and to bankers who have made or may contemplate making loans to the business.

Both the ultimate and immediate goal of the audit, from the standpoint of the auditor on the work, is the satisfactory verification, in preparation for the auditor's certificate, of the accounts appearing in the client's balance sheet and accompanying income statement. As schedule by schedule is built up and account after

* See page 6.
** See pages 23-4.

account is verified, their relation to the final statements is the real point of interest, and all things else are secondary. Even though the auditor may discover clerical errors or errors of principle, or may uncover fraud or ascertain that the accounts have been manipulated to deceive proprietors or creditors, these things affect the balance sheet audit only in so far as they affect the accuracy of the final accounts and as they tend to show that there is not in existence in the business under audit a system of internal check sufficient to assure to the client substantial protection against the risk of defalcations. Unless such errors are of comparative importance the auditor will probably not alter the statements or accounts of the client.

Limitations of the Balance Sheet Audit

The balance sheet audit, as the title implies, has certain limitations. Fundamental to such an audit is the examination of the system of internal check in order to determine to the satisfaction of the assistant in charge that the existing system, together with certain tests and specific verifications on the part of the auditor, will afford to the client a reasonable protection against defalcation or other manipulation of the accounts. In a balance sheet audit no detail examination can be made of all transactions affecting the assets or liabilities but the sampling or test method must be used. Likewise, only a general examination can be made of the items included in the profit and loss account though a complete verification of a balance sheet assumes an examination of the operations that create the surplus item. Rarely, for illustration, will an auditor in a balance sheet audit verify the footings of the petty cash book, yet if it were later discovered that footings had been systematically overstated and the client defrauded the auditor might be very fortunate, unless he had carefully outlined to his client the limitations of the audit, merely to lose his client as a result of supposed negligence on his part.

It is well, therefore, by means of correspondence or by a statement in the report or in some other way to place definitely before the client the fact that there is a difference between a balance sheet audit and a complete cash audit. Such information may very well be placed in the beginning portion of the auditor's report, when such a report is rendered, and the following may be taken as typical of the information to be desired:

"In line with the procedure adopted in previous audits, our examination was directed to the verification of the assets and liabilities as of December 31, 1922, and of the profits and income for the year ended on that date. It will, therefore, be understood that we have not attempted to make a detail check of all cash or other transactions within the period under review. However, the broader examination necessarily brought to our attention a large number of these transactions and we are pleased to report that so far as our examination extended the accounts were found in order."

This in reality describes or defines the balance sheet audit and in such case the client is informed at the outset of the auditor's report just how extensive the audit has been. As stated above, when a certified balance sheet only is given and no report is rendered as the result of an audit it is necessary in some other way to make known to the client the limitations of the balance sheet audit. If no other method is feasible it should be a part of the duties of the accountant in charge of the audit to outline clearly to the client the scope of the work to be done.

The Report

Upon the completion of a balance sheet audit the accountant usually will prepare and submit a report to the client. This report will consist of a very brief statement of the instructions received from the client and of the work done on the audit, together with a summary and a more or less detailed discussion of earnings and of financial position. A balance sheet and a statement of income and profit and loss for the period ending at the date of the balance sheet will be appended, while often other comparative or statistical statements will be included.

The comments in the report should be limited to essentials and to those things which it is especially desirable to bring to the attention of the client. No definite rules can be expressed to determine which things are important, for this is dependent upon conditions existing in each individual business and the deciding of what is important requires the exercise of good judgment on the part of the auditor. The size of the business and the familiarity of the client with the practices and methods of professional accountants will determine somewhat the length and amount of detail of the report, as will also peculiar conditions or characteristics of the

business or of the person or persons who are primarily interested in the report. The audit in the case of a small business will ordinarily be more detailed than in the case of a large organization, perhaps because the system of internal audit will not be as carefully and as well developed in the smaller business. It is also obvious that in the case of large business organizations with highly developed staffs of statistical assistants it is unnecessary for the client to receive from the auditor the amount of information which the small client should have. It is not uncommon in practice in the case of many large and nationally known organizations for the auditor to submit only a certified balance sheet as the result of his audit. All the statistics and detailed information which the auditor might present have probably been already prepared and presented by the accounting and statistical staff of the organization itself. The client does not desire, therefore, that the auditor do more than verify and certify the accounts. It should also be noted that such large organizations are ordinarily entirely familiar with the limitations of a balance sheet audit.

The discussion part of the report is usually divided into rather definite sections, somewhat as follows:—

(*A*) The introduction, including a statement of the scope of the audit as set forth in the client's instructions, and a statement, similar to that quoted above, giving in greater or less detail the limitations of the audit.

(*B*) A brief summary, preferably in comparative form, of the profit and loss and income of the period. Fundamental conditions or accounting methods which may have had a direct bearing upon the earnings of the period would receive such comment as the auditor considered it necessary or feasible to give.

(*C*) A statement of the changes in the financial position of the company during the period under audit which shows the resources that have been provided from various sources during the period and the application of these resources to various purposes.

Such a summary of the changes in financial condition appears in Appendix A immediately following the balance sheets and the summary of surplus. A similar form also appears as Exhibit 6, Appendix B. Many times these changes in the financial position

of a company more completely reflect the tendencies and policies of the business than do anything else. This is particularly true regarding the disposition of the net profit and earnings for the current period.

(*D*) The balance sheet. The auditor's discussion of the balance sheet is ordinarily confined to taking up the various accounts and amounts in the order in which they appear in the balance sheet and commenting briefly upon each one. Over or under provision for depreciation, insufficient reserve for uncollectible accounts, composition of current accounts and investments, etc., are representative of what the comments would cover.*

(*E*) General. This section of the report would consist of special comments, criticisms or suggestions concerning accounting methods or other conditions found to exist in the client's organization which are sufficiently important to bring to the attention of the client.

The Appended Exhibits. In addition to the discussion part of the report, subdivided as outlined above, there will be appended a copy of the balance sheet, a summarized or detailed statement of profit and loss for the period ending at the date of the balance sheet, and perhaps other exhibits which are sufficiently important to merit their inclusion in the report.

The certificate of the auditor may be typewritten across the bottom of the balance sheet though oftentimes when the balance sheet is included with a report it will not be signed or, if signed at all, will bear merely the wording, "with our report of —— (date)." In case the auditor attaches his certificate to the balance sheet, he usually includes a specific reference to the accompanying or "relative profit and loss account." This reference ties together the two statements which have been prepared as a result of the audit, and suggests to anyone who may peruse the balance sheet that the financial balance sheet may be more thoroughly understood, particularly the changes in proprietorship, if each statement is read in conjunction with the other.

* For a more complete illustration see Bell, W. H., *Accountants' Reports*, pp. 204-19.

The Balance Sheet

The balance sheet, as previously stated, may be said to represent the goal of the financial or balance sheet audit. Clearness of statement, next to accuracy, is perhaps the greatest objective in a balance sheet and, in order that this may be accomplished, each caption in the balance sheet should express as nearly as possible the real nature of the items included thereunder. The ledger accounts or other captions used by the client should be ignored if they are not clear and do not set forth the real meaning of the amounts appearing in the balance sheet. It is not uncommon in practice to find misleading descriptions in the final statements, and the auditor must use special care to see that any balance sheet to which he attaches his certificate not only truthfully but also clearly sets forth or fairly states the real financial condition of the business under audit.

The auditor should take special care to consider the accounts and the statements prepared therefrom from the standpoint of the client or principal. Readers of balance sheets are usually not technical accountants and the statements must be especially clear if it is to be certain that they will not be misunderstood. The professional auditor should also bear in mind that he has a double responsibility—his responsibility to the public requiring an even finer sense of candor and justice than that to his client. He has not discharged his responsibility to the public by a mere refusal to countenance irregularities in the accounts, but he must insist on reasonable clarity in presenting and expressing the accounts.

General Form of Balance Sheet

The form of the balance sheet will vary somewhat according to the purposes for which it is prepared and will depend upon the accounts which are included therein. The statements, however, should show the financial condition of the business and all essential information should be set forth clearly so as to be readily understood both by stockholders and by the public. It is also well to remember, in the preparation of a balance sheet, that because of the impossibility of exactly measuring or valuing every asset in the possession of the company the balance sheet is to that extent an estimate only. This is particularly true where there are large quantities of raw or worked materials and, to a greater or less extent, of the property and plant accounts. Expressed in the

words of Sir Arthur Lowes Dickinson, "it follows that a balance sheet can only be an approximation to facts, the degree of approximation depending upon the skill and accuracy with which the estimates are made." *

The form the balance sheet will take will depend upon the purpose for which it is to be used. Some writers argue that the "simplest and best" form of balance sheet is that which shows quick assets first, grouped according to convertibility and availability, with the totals shown, and followed by fixed and other assets in the order of their convertibility. This is probably true of a balance sheet presented to or used by bankers for purposes of short-time credit, but a study of published balance sheets shows that most companies do not use this form of balance sheet for presentation to stockholders and for publication purposes, but rather prefer the first form of balance sheet shown in APPENDIX A. Usage has made this the accepted form of balance sheet. The second form of balance sheet shown in APPENDIX A, however, which is somewhat in accordance with the form recommended in *Approved Methods for the Preparation of Balance Sheet Statements*, is increasing in favor not only for credit purposes but also because of the growing importance of capital stock of no par value. It is convenient in the latter case to allocate all proprietorship under a single heading, such as "Capital and Surplus"; however, the reader should understand that earned surplus should be shown separately in the case of no par value stock just as for stock with par value.

Some of the larger companies in their published statements arrange the asset side of their balance sheets in a way similar to the first balance sheet shown, namely, with property and fixed assets first, yet segregate all proprietorship at the bottom of the liability side of the balance sheet. The thing which is important for the auditor or his assistant to bear in mind is that any form of balance sheet which is preferred by the client and which sets forth *with reasonable clearness* the true financial condition of the company should be accepted.

Balance Sheet the Balance Sheet of the Client

In many cases, particularly in the case of the larger companies, the balance sheet is prepared by the client and merely presented

* See *Accounting Practice and Procedure*, p. 32.

to the auditor for verification. English law* requires that balance sheets which are submitted for audit be signed by two directors, while the Commonwealth of Massachusetts requires** that the president and treasurer and a majority of the directors of every corporation shall prepare and sign annually a report of financial condition which, for corporations with a capital of $100,000 or more, must be presented to independent auditors to be by them verified and certified. In other words, the balance sheet is the balance sheet of the client, whereas the certificate is the certificate of the auditor. *Even if the accountant prepares the balance sheet he merely prepares it for the client* and an auditor should not depart from that rule. He should insist that the balance sheet be the balance sheet of the company and then, as auditor, he should say whether or not in his opinion it is a fair presentation of the financial condition of the company under audit.

A brief consideration of the subject will emphasize its importance. If a president of a company, for illustration, goes to his banker and says, in substance, "I will have a firm of accountants prepare a statement and will then give it to you," he will not feel the same responsibility in respect to that statement, which may not be an entirely fair picture of the business, as he would if he had first of all said, "This is my statement of the affairs of my company and I will have it verified by independent accountants." If the auditor prepares the statement and something turns out to be slightly in error the president may blame the accountant for it, but if he signs it as his own statement of the affairs of the company he has then assumed a definite responsibility. The auditor has a responsibility also, but it does not diminish the responsibility of the corporation and its officers. It is largely for this reason that one observes balance sheets prepared and certified by various firms of public accountants in quite materially different forms for businesses which are very much alike. This at first thought may appear inconsistent on the part of the auditor but it should be remembered that in substance the accounts are the accounts of the corporation and that the auditor's duty is limited to determining that the accounts are correct and whether or not in the form in which they are prepared they present a fair picture of the company's financial position. It will be seen, therefore, that

* Company's Consolidation Act 1907, Section 19 (3).
** Acts of 1903, Chapter 437, Section 47.

the auditor is not inconsistent merely because he certifies accounts in different forms for similar businesses. The auditor may recommend changes in the form of the accounts, but he is not in any position to insist upon such changes if the balance sheet and income statement as prepared by the client disclose the facts sufficiently and fairly.

Preparing the Balance Sheet

The balance sheets presented in APPENDIX A, whichever form is preferred, would be prepared either by the auditor or by the client's accountant. In case of a small business, as previously stated, it is probable that the auditor would actually prepare the final accounts for the client, but in the case of a large organization it is almost equally certain that the balance sheet would be prepared by the client and would be presented to the accountant in charge upon the commencement of the audit or shortly thereafter. From the standpoint of the audit the balance sheets appearing in APPENDIX A either have been built up from or at least are completely supported by the various schedules in the working papers.

The comparative figures for the previous year's accounts may be inserted in the balance sheet for the information of the auditor but ordinarily such figures are omitted in typing the statement for the client. The auditor should ordinarily prepare the balance sheet exactly as it is to be typed, except that, as in the case of the exhibits shown, instructions may be given to the typist to omit the cross-index letters and the comparative figures for the previous period. Often a working balance sheet similar to Exhibit 7, APPENDIX B, would be used instead of the working trial balance shown in APPENDIX A, and this would practically always happen if the balance sheet was prepared by the client and handed to the auditor for verification. In such case the working balance sheet would show the comparative figures, and the statement prepared for copying would show the current figures only. In practice the procedure in the same office may vary in this respect, depending upon the size of the engagement and upon the auditor who is doing the work. The balance sheets shown in APPENDIX A perform a double function by serving both as comparative balance sheets for the auditor and also as finished schedules for typing the statement for the client.

In addition to being prepared from or supported by the various

working schedules, too great care cannot be taken in proving the additions and in checking back each amount in the balance sheet to the leading schedule by which it is supported. In practice this is ordinarily done by the auditor before the balance sheet is typed. Yet after the statement has been typed and proof-read it should again be verified for additions and completely checked back to the leading schedules before it is presented to the principal to be signed and before it is submitted to the client. Not infrequently errors are found in the final typewritten statements even though all the precautions outlined above have been taken.

The Certificate

The certificate which is attached to the balance sheet and relative profit and loss account is solely the property of the auditor and may be worded in accordance with what he believes to be the requirements of the case. In general there are two distinct types of certificates—

(*a*) The short certificate, which is merely a statement that the accounts have been audited and that in the opinion of the auditor they are properly drawn up so as to show the financial position of the company as of a given date, and

(*b*) The long or descriptive certificate, which in addition to certifying to the accuracy of the balance sheet describes in general all that has been done in the process of verifying the balance sheet and in reaching the conclusion that the balance sheet as prepared fairly presents or is properly drawn up so as to show the financial position of the business.

As typical of a short certificate the following is presented:—

> "We have examined the books of the North American Shipbuilding Company for the year ended December 31, 1922, and we certify that in our opinion the balance sheet and relative income statement, respectively, fairly set forth the financial position of the company and the results of the operations for the year."

The short certificate would be appended to the balance sheet, as shown in the case of the first balance sheet in Appendix A. The certificate attached to that balance sheet may be taken as typical of the long or descriptive certificate.

The auditor, upon the completion of a balance sheet audit, will prefer to give a short, clean-cut certificate whenever it is possible

to do so. Many times, however, the client will prefer the descriptive certificate, which will then ordinarily be given. The auditor, also, will prefer to give a descriptive certificate in case of extraordinary or unsatisfactory conditions existing with respect to the accounts. Furthermore, it is not uncommon for bankers when accepting certified statements as a basis for the extension of credit to express a preference for the long certificate, and, at least until recently, one of the largest mid-western banks refused to accept a certified statement in which the auditor did not describe in his certificate the verification which had been made of each item appearing in the balance sheet. Occasionally, at the request of the client, both a short and a long certificate might be given, though this would be quite unusual practice. Obviously, in case of either a short certificate or a long certificate the auditor may qualify or otherwise limit his certificate if the conditions, in his opinion, make it imperative for him to do this.

The Statement of Surplus and Profit and Loss

Accompanying the balance sheet which will be presented to the client will ordinarily be a summary of surplus and of profit and loss for the period ending at the date of the balance sheet. This statement also, as in the case of the balance sheet, may be prepared by the client and merely be verified by the auditor. All changes in surplus and all important items, at least, comprising the statement of profit and loss will be supported by schedules which will analyze somewhat in detail and will show to the satisfaction of the principal or auditor in charge that the amounts set forth therein are correct and are clearly stated. The reader should study not alone the Summary of Surplus immediately following the balance sheet (Appendix A), but should also observe the form and content of the supporting *JJ* schedules.

As in the case of the balance sheet, the summary of surplus and profit and loss may be prepared from a working profit and loss statement, which would usually be done if the accounts were prepared by the client and submitted to the auditor for verification; or the final statement may be prepared from the working trial balance as illustrated in Appendix A. It is probable that in the case of a company as large as that used for illustration in Appendix A such accounts would have been prepared by the client, but for illustrative purposes the method outlined was considered prefer-

able. The statement should be prepared in the form in which it is to be typewritten. Those who do the typewriting are not supposed to be responsible for the form of statements, but rather to type them in accordance with the copy prepared by the auditor. The cross-index references to the various supporting schedules, etc., may be included in the exhibit, and the assistant who prepares the statement may merely give instructions to omit these references when the schedules are being typewritten for the client.

Summary of Changes in Financial Position

The Summary of Changes in Financial Position, which has been previously referred to in this discussion, is prepared by comparing the opening and closing balances of the period for each balance sheet account and by recording the net change for the period as providing or disposing of resources. It furnishes two kinds of information. First, it shows all sources from which resources or funds have been provided during the period under audit, and second, it shows how those resources have been applied or expended. This is information of a most important character, for it records not only the major changes in the financial position of a company but it reflects the tendencies and policies of the business, particularly as to its method of providing resources and its ability in doing so, and also its policy in disposing of or applying those resources which have been provided. Such a statement, for instance, shows whether the resources of the year were provided through the liquidation of current assets, by an increase in current or fixed liabilities, by new capital paid in, or through a net profit for the period. Likewise the statement would show whether the resources were applied or expended in acquiring additional assets, in liquidating liabilities, or were merely disbursed as dividends. If a statement of this kind is included in the text of the report it is not necessary also to append it as an exhibit. Whether included in the text or as a separate exhibit the statement should usually be prepared in rather condensed form; a much detailed statement of this kind is liable to be confusing.

The statement of Changes in Financial Position, as already mentioned, appears in Appendix A following the Summary of Surplus and as Exhibit 6, Appendix B. Information in addition to that recorded on these schedules may be given in the more detailed report, and the auditor may enter into as minute a discussion regard-

ing the periodic provision and disposition of resources as he considers feasible or necessary. Thus, in Exhibit *6* the auditor may desire to differentiate between bank loans and other current liabilities—the summary at the bottom of the form might then record "Current Liabilities (exclusive of bank loans)", showing separately the increase or decrease in bank loans. Either the form shown in APPENDIX A or that included in APPENDIX B may be prepared, if desired, in comparative form; still other variations of interest will suggest themselves to the experienced auditor.

The complete report to the client, then, will usually consist of text material in which will be discussed the essential points concerning the earnings and profits and the disposition of resources provided during the period under audit, as well as the financial position of the business at the close of the audit period. To the text will be attached the balance sheet and relative income statement as certified by the auditor. However, whether the certified accounts alone will be presented to the client or the accounts will be accompanied by text material is largely dependent upon the desire of the client for whom the work is performed.

The Working Sheets

When actually beginning an audit, as previously stated, the auditor will obtain from the client or will proceed to take off a trial balance of the company's general ledger. In case the client has not already prepared the final accounts this trial balance will probably serve as a working guide for the audit, and the totals of all leading schedules prepared during the audit will agree or be agreed with the balances appearing in this general ledger trial balance. The closing or final trial balance figures for the previous audit period should always be included, usually in columns to the left of the captions, for such a trial balance is the easiest and most certain way of discovering or tracing changes in account classifications which may have occurred since the last fiscal closing of the books.

To the right of the captions the trial balance may be prepared in columnar form, showing in the first two columns the ledger balances as taken from the company's general ledger, followed by sets of double columns for adjustments, for the profit and loss accounts and for assets and liabilities. This type of working sheet, which is shown in APPENDIX A following the final statements for the client,

is very commonly used and probably is to be preferred on smaller engagements where the accounts have not been finally prepared for the auditor or where numerous small adjustments must be made before the accounts can be closed for the period under audit. It is also entirely feasible, if desired, to provide columns for an adjusted trial balance at the right of the adjustments. The adjusted trial balance columns would then be followed by the profit and loss and the asset and liability sets of columns, as illustrated.

Adjustments in the company's accounts should be made in the form of carefully prepared journal entries. These entries should be numbered consecutively and should be posted to whatever form of working sheet is being used. Illustrative adjustment journal entries will be found in APPENDIX A, immediately following the ten-column working trial balance. These adjustments should be cross-indexed to the working trial balance or other working sheets, and also to the schedules that are affected by the entries.

The Working Balance Sheet

When the books have been closed, however, and the final accounts have been prepared by the client and are presented to the auditor when he takes up the work of the audit, it is better to use in place of or in addition to the columnar working trial balance what may be termed a working balance sheet and working income and profit and loss statement. The form such a sheet usually takes is shown as Exhibit 7, APPENDIX B. If desired, separate sheets may be used for assets and for liabilities, though ordinarily the working space on a single sheet is sufficient for both. A column to the left of the captions should be provided for the comparative or final figures of the previous audit.

The special advantage in the use of the working balance sheet, is that it affords at the outset a bird's-eye view of the ground to be covered and gives a ready comparison with the former year's final figures. It further enables the auditor in charge to discuss intelligently with the client the company's position as disclosed by the working balance sheet and it somewhat facilitates the practical laying out and subdivision of the work of verification.

To provide a specific illustration: If a working balance sheet and income statement were used, the trial balance figures *before adjustments* would be listed under the proper captions in the *per book figures* column (Exhibit 7, APPENDIX B). The adjusting journal

entries would then be posted to the working balance sheet and income statement, just as illustrated in the case of the columnar working trial balance shown in Appendix A. Sometimes a client does not wish, for one reason or another, to record the auditor's adjustments or certain of the adjustments in the books of account, and then a working sheet becomes particularly important in order to have a record of the adjustments which were necessary to agree the accounts with the final adjusted figures appearing in the balance sheet and income statement. Such figures also enable the auditor to discuss with the client the exact composition of each item and amount appearing in the final balance sheet which is to be certified. Whether a working balance sheet or a working trial balance be used as the basis of an audit, *a rough balance sheet should always be prepared early in the audit so that a general view of the ensemble may be obtained.*

The use of one or both of these types of working sheets is practically essential, although individual auditors may work out minor variations in the sheets as illustrated. These sheets are the backbone of the working papers and serve as a guide in building up the individual schedules which are to be discussed in the remaining chapters of this book. They also furnish the final figures for the balance sheet and statement of income and profit and loss for the client. All individual leading schedules should support and be always in agreement with the final adjusted figures appearing in the working sheets, while in turn both the schedules and the working sheets support the final accounts which summarize the results of operations for the period and set forth the financial condition of the business at the close of the period under audit.

CHAPTER IV

The Construction, or Property and Plant Schedules*

Capital vs. Revenue Charges

All good accounting requires distinguishing between charges to capital and charges against revenue. Mr. Dicksee states the well-recognized truth that this distinction "is of primary importance", for it determines largely "the fundamental question of what profits have actually been made by an undertaking during any given period."

No absolute rule can be laid down for determining whether an item is a capital or a revenue charge, and oftentimes the greatest judgment and discretion must be used in making the decision. The general rule in the case of an industrial or mercantile concern, perhaps, is that if the expenditure incurred in the particular case *increases* the property or the efficiency and earning capacity of an asset it is a capital expenditure, whereas if the expenditure merely *maintains* an asset at its old efficiency or earning power it is a charge against revenue. Another test applied is whether there is any actual value present from the standpoint of a "going concern" at the date of the balance sheet, and it is this test which determines, at least very largely, the value of small tools, dies, patterns, drawings and similar items. The accountant, in examining expenditures, should keep continually in mind these fundamental distinctions, for upon their proper observance depends the correctness of the capital assets in the balance sheet.

Economic vs. Accounting Capital

Every auditor is undoubtedly familiar with the fact that, as ordinarily used in accounting, there is considerable difference between the economic and the accounting views of capital. A brief statement of the economic conception of capital will be, perhaps, the easiest method of differentiating the divergent views. The primary *economic* factors in production are *nature* and *man*. Nature includes not only the surface of the earth and the materials

* See *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 14-5.

above and beneath it, but also bodies of water and what they contain. This factor is commonly called *land*. Man is the directing, active agent, supplying the labor and managerial ability.

Then, as secondary to these two primary economic factors and derived from them, there is a third productive factor, namely, *capital*. Capital, though developed from *land* and man's labor, represents the surplus production over and above that needed for current use; it consists of those *things, the products of past industry, which are used as aids to the further production of wealth and which yield an income to their owners*. Capital to the economist is of two main kinds: (*a*) productive capital, such as machinery or factory buildings used directly in production, and (*b*) consumable capital, *i.e.*, the food, clothing and other consumable goods *in the possession of producers or merchants*, destined for the maintenance of man while he carries on further production.*

While even among economists there is no absolute agreement regarding the meaning of capital, it is obvious that capital goods or capital assets from an accounting standpoint mean something different. Capital assets include those things (even land) which the individual or business enterprise possesses and uses for productive purposes, and which are capable of lasting over considerable periods of time and for many processes of production, being subject only to wear and tear, to depreciation from the passage of time and to obsolescence. These assets, as classified by Sir Arthur Lowes Dickinson, include:—

(*a*) Land and improvements thereon, including mineral rights and development thereof,
(*b*) Buildings and structures,
(*c*) Plant, machinery and fixed tools, permanent way of a railroad, etc.,
(*d*) Movable equipment,
(*e*) Furniture and fixtures,
(*f*) Patterns, drawings, dies, etc., and
(*g*) Patents, good-will, franchises, etc.**

Verification Work — General

In taking up the verification of capital assets or of any item appearing in the balance sheet or income statement the junior assist-

* See Taussig, F. W., *Principles of Economics*, Vol. I, Chapter V.
** See *Accounting Practice and Procedure*, pp. 34 and 75-82.

ant, and particularly the beginning junior, should be given full directions by an older assistant as to how he should proceed. The beginning junior's first work is naturally of simple character and is done under explicit directions. An exact program should be laid out for him by the more experienced assistant on the engagement. The senior assistant on an assignment should not only supervise all schedules prepared by juniors but he should give them every opportunity to ask advice.

The junior, in starting his work, must begin with one tiresome and monotonous detail after another. It is highly desirable, however talented a man may be, that he should do his fair quota of this tiresome work, not only for the value it is to him personally but also for the value it will be to him when juniors will be working under him, that is, when he must undertake to pass upon the work of junior men. Novel and interesting points continually arise, the solution to which can be discovered only by actual experience. There is no occupation worth while that does not involve a certain amount of drudgery; the way to make the greatest progress is to perform conscientiously and cheerfully whatever one may be assigned to do.

The assistant in charge of any assignment should be held responsible for the accuracy of all work, including all typewritten reports and accounts and any corrections thereof which may be necessary. This means that junior assistants must at all times work under the direction of their senior, and the attitude of the junior should be one of loyal acceptance of the senior's decisions. This should not preclude talking things over in a friendly way, but discipline there must be in every walk of life and, as the responsibility rests on the senior in charge of the work, the junior must cheerfully accept the decisions of his senior and work with him to the best of his ability. This is necessary not only in the interest of the junior but out of proper regard for the senior and for the interests of the firm with which he is associated.

The junior should make an absolutely clear and honest record of all work he does and above all he should never make the mistake of passing over things which he does not understand. Unfortunately, this sometimes happens and it may lead to awkward, if not serious, consequences. It may be somewhat embarrassing but if the junior does not know how to proceed — and the same

statement applies as well to a senior — he should immediately refer the matter to his superior. He is doing himself and his firm a great injustice if he adopts any other policy.

Every man who enters accounting should take all his junior work seriously and should not try to get away from it until he has been so thoroughly drilled in it that he will know, when the time comes to supervise the work of others, from his own experience how it should be done and how long it should take. He will then be able to talk to the man, as senior to junior, sympathetically but with the comfortable feeling that his actual knowledge is greater than that of the junior assisting him.

Verification of Cost of Properties

In the balance sheet the cost of properties or of property and plant may be stated as a single amount or, if desired, several subdivisions of the item may be shown. The satisfactory verification of the amount requires an analysis of the expenditures of the period. This includes a verification of the charges for additions and improvements which may have been undertaken or completed during the period and tend to increase the property or the efficiency or earning power of the business. Proper schedules should be prepared to show the expenditures made for capital account, and these schedules should support the property amount in the balance sheet. The form of such schedules will necessarily vary on different audits, but all items applicable to improvements should be assembled. The expenditures as a whole should be compared with the estimated value of the improvements or, still better, with the official authorizations. As typical of such a verification the property schedules prepared in Appendix A, Schedules *A* to *A-6*, are presented. These schedules will assist the reader to visualize not only the method of making the verification but, as well, the method of presenting the results.

The summary schedule (Schedule *A*) should be so prepared that it will enable the principal to visualize at a glance the whole situation as regards property and plant, showing the final figure for the previous period and each major addition and deduction, and agreeing the closing figure with the amount appearing in the balance sheet. The summary schedule will then be supported by as many sub-schedules as are necessary to verify and explain all these changes, and it may involve as much or as little detail as

the circumstances of the individual case demand. Comments regarding the extent of the detailed verification should be made, as illustrated on the various property schedules in APPENDIX A.

If it is desired to show as a single schedule a summary of the property accounts and of the respective provisions for depreciation a schedule similar to Exhibit *8*, APPENDIX B, may be used. But if such a schedule is prepared, which will summarize both the property accounts and the provisions for depreciation, it is still not improbable that a brief summarized statement of the property accounts will be prepared in form similar to Schedule *A*, APPENDIX A. Both these schedules furnish comparative figures, and this is quite important in the case of most leading schedules. If there are numerous companies, branches or plants involved, it is also desirable to include, after the "Deductions" columns in Exhibit *8*, a column for "Transfers" between the numerous units of the composite organization. Otherwise the columns for additions and deductions will, to this extent, show merely debits and credits to the several property subdivisions and not the actual changes of the period.

The beginning figures for the property accounts and for the provisions for depreciation in a schedule such as Exhibit *8* will be taken from the auditor's records for the previous audit if he has made a previous audit or from the ledger accounts in the case of a first audit. Gross additions to the property accounts for the year and, likewise, all credits either on account of property dismantled and sold or on account of depreciation will be summarized and supported by necessary subsidiary property schedules. The general ledger balances at the end of the period for each property item and for each of the provisions for depreciation should either agree or be agreed with the figures which appear in the balance sheet.

The provisions for depreciation for the current year will be ascertained by an examination of the journal entries or of the vouchers which give rise to the credits to the depreciation reserve account. It may be advisable to accumulate by means of additional schedules the monthly provisions for depreciation showing for each class of property the values to be depreciated, the percentage rates used and the amounts of the provisions.

The charges against the reserve for depreciation should be analyzed by comparing them with the credits to the property accounts

for property dismantled or scrapped, giving full explanation of any charges which cannot be accounted for in this manner. The credit balances of the provision for depreciation accounts at the end of the period under audit should agree or be agreed with the general ledger trial balance and the figures which appear in the balance sheet.

In preparing a schedule similar to Exhibit *8*, Appendix B, the assistant in charge of the audit ordinarily should note thereon his opinion concerning the adequacy of the reserve for depreciation and any additional requirements which he believes to be necessary in order to provide for wear and tear, abandonments or dismantlements. He should prepare any journal entries which are necessary to adjust either the property or the reserve accounts. He should also express a general opinion as to the character of the additions made to property accounts during the year and should ordinarily comment upon the over- or under-expenditures on appropriations.

Verification of Authorizations

In most progressive business organizations all construction expenditures are based upon appropriations voted by the board of directors or by a finance or other committee. This is especially true of construction of any magnitude. Any satisfactory verification of the property accounts must, therefore, take into consideration these appropriations which have been voted for construction purposes.

All authorizations on account of which expenditures have been made during the period under audit should be examined, and the auditor should schedule them to show the authorization number, construction order number, description of the work done or the account chargeable, the amount of the authorization, the amount expended to date, the estimated percentage of the work yet to complete, the estimated cost to complete the work, and the amount by which the authorization will be more or less than needed. Such a schedule would be somewhat similar to Schedule *A-1*, Appendix A. When costs of additions or improvements have materially overrun the authorization, or will probably overrun it before the construction is completed, the auditor should make careful inquiries and should obtain satisfactory explanations. Each authorization should be examined for the approval of the president

or general manager, or other officer having authority to make such approvals, and this information should be included in the working schedule.

The First Audit

In the verification of capital assets it is important to differentiate between a first audit and succeeding audits. On a first audit a certificate should be obtained from the company's attorney, or from someone else in authority, to the effect that all titles to property are in order and that the properties are free from encumbrance. A schedule should be prepared, which would probably be included in the permanent file papers, showing the arrangement of lots, acreage, etc. The property accounts should be analyzed from the beginning of the business, or over a considerable period of time, and care should be taken to explain fully all important increases or decreases in the amounts. Appraisal or similar adjustments should be analyzed fully. In fact there are so many reasons why a complete analysis of the cost-of-properties account is needed that the auditor cannot too carefully perform this part of the work, yet too much time cannot be given to this or the client will be apt to raise serious objections because of the cost. The schedules used to record this analysis will ordinarily be similar to those used for verifying the charges and credits to cost of properties for the period under audit. These analyses should usually be included in the permanent file working papers.

Likewise, an analysis of the surplus account from the beginning of the business, or during a period of considerable length to be decided upon by the principal or assistant in charge, will show any material adjustments in the property accounts during preceding periods and should be used as a check upon the accuracy of the property analysis. It is not uncommon, particularly with reference to the property and surplus accounts, for auditors to find that adjustments made upon the previous balance sheet have not been taken up in the client's books. Until one has given thought to this problem and has learned by experience how to treat it, he may have considerable difficulty in preparing the accounts correctly. This will receive attention in the discussion of Surplus in Chapter XII.

Verification of Current Additions

The complete verification of capital additions involves the

analysis and scheduling of purchased materials, miscellaneous construction expenses and of miscellaneous purchased equipment. The vouchers should be inspected for approvals and compared with the books of entry, and the auditor should ascertain definitely that the liabilities have been properly set up in the accounts. In a well-organized system of accounting the receiving slip for the goods will usually be attached to the invoice. Schedules and such sub-schedules as are necessary should be prepared, and a full and complete statement of work done with reference to the verification should be included. Schedules *A-2*, *A-3*, and *A-4*, Appendix A, are illustrative of such schedules. The verification should show that the purchases are reasonably related to the project; for example, mahogany furniture would not ordinarily be charged to the cost of foundry equipment. Whether all items of expenditure shall be vouched or only the larger items shall be checked will be determined by the auditor in charge. Usually a verification of the larger items and a substantial test of the smaller items is considered sufficient in a financial or balance sheet audit.

When additions to property, for illustration, machine parts, etc., are manufactured instead of purchased, such additions may be analyzed somewhat as follows, and then each of the subdivisions of the manufacturing cost may be analyzed in as great detail as conditions warrant:

Analysis of Additions to Property Account

Order No.	Quantity	Article — description	Manufacturing Cost			
			Material	Labor	Burden	Total
			$	$	$	$

This schedule calls for a verification for each property account appearing in the general ledger trial balance of material requisitions, of payrolls and the distribution thereof, of burden expenses, etc. It should be observed that ordinarily only *direct burden* should be included in the cost of construction. The junior should ascertain from the accountant in charge whether all items or only the larger items shall be verified or thoroughly tested. If a test

is considered sufficient, it should extend also to small amounts in order to forestall undervaluations.

As a general rule separate schedules and sub-schedules should be prepared for each major addition to the cost of property, containing for each item a sufficient analysis to show that the amounts are not in the nature of renewals but represent real additions or betterments to the property account.

Construction Contracts

Construction contracts, or a very substantial portion of them, should be inspected and any liabilities on their account should be carefully ascertained. Brief notes may be made regarding them, of which the following may be illustrative:

"Contract with Universal Shipbuilding Company, dated September 25, 1922, to furnish the material and construct four concrete steps outbound way slip No. 4. To be completed on or before February 1, 1923. Contract not to exceed $21,200.00. Contract signed by President, per E. J. C. Work estimated 80 per cent. completed as of date of balance sheet." (See authorization M-725, Schedule *A-1*, Appendix A.)

Work in progress or payments made on account of such contracts *must be included as Cost of Property and not as Inventories.* Likewise, instalment payments unpaid and accrued items not actually due for such contract work should be ascertained from the contracts and from certificates of quantities of work actually completed, or from invoices received, and the amount, if of comparative importance, should be set up as a liability in the balance sheet. The contingent liability on account of construction not yet completed, if of substantial amount, should be set forth in a footnote in the balance sheet.

Property Salvaged During Audit Period

When property has been salvaged or otherwise disposed of during the year, the auditor should ascertain when the property was acquired, its cost or purchase price and whether or not this amount has been charged off the books; also that the depreciation provided to the date of disposal was charged to the reserve for depreciation account. The difference between the cost of the assets, less depreciation provided to date, and the scrap value realized — subject to any special instructions from the office to which an assistant is attached — whether a profit or a loss, in

case specific rates are used for each item or class of property, may be adjusted through the surplus or profit and loss accounts. In case a general composite rate is used it may be considered better practice to make the entire adjustment through the Reserve for Depreciation, and it is not unusual in practice for the amount to be closed into the depreciation account. These adjustments are necessary usually because of the arbitrary method by which the amount of depreciation is determined, and in such cases it is proper that the depreciation accounts should bear whatever adjustments are finally necessary when the asset is salvaged or scrapped. (For illustration see Schedule *A-5*, Appendix A.)

"No Change During Year"

The explanation "No change during year" for a property account can be accepted only in case there has been *no* entry to the account during the period under audit. It is possible, though very improbable, that an account would have the same net balance at the close of an audit period as at the beginning, yet a number of transactions affecting the account could have taken place during the year. The auditor should use every reasonable means to be sure that capital assets have not been disposed of or scrapped during the period under audit and no record whatever made of the transactions. Such procedure, obviously, means an overstatement in the balance sheet of the Cost of Properties. If transactions of any kind have taken place during the year they should be fully explained.

Statement of Work Done

A statement of the work done in verifying the cost of properties should be prepared and included with the property working schedules. This statement may be made a part of each working schedule, as illustrated in Appendix A, or a separate statement may be prepared as illustrated for inventories (see Schedules *D-13* and *D-14*, Appendix A). The former method enables the principal or assistant in charge, when taking up the working papers, to know definitely what verification was made of each particular part of the work. The following statement of work done may be taken as illustrative of what is desired:

> "Invoices were examined for approvals, for receipt of goods on account of outside purchases and for payments on

contract. Contracts were examined and all authorizations were verified.

"All transfers between plants were checked to journal vouchers, and a test was made by tracing various large items from and to the respective accounts to which they were debited or credited.

"On work done by the company a test was made of some of the larger jobs. This consisted of examining material requisitions and of totaling labor cards. The burden applied to these jobs was tested and found in each case to consist of direct construction expense only.

"Where capital items were disposed of during the year tests were made to ascertain when they were purchased, that the original value was charged off the books and that the depreciation provided on machines or fixtures was charged to Reserve for Depreciation. The difference between asset value, less depreciation provided, and scrap value received from the sale (whether a profit or a loss) was adjusted through the depreciation account."

Good-will and Other Intangibles

As long as good-will and other intangibles were a factor in determining invested capital for purposes of taxation it was particularly important to give somewhat close attention to them in the conduct of an audit. In any case the supporting schedules should show the composition of the original amount recorded in the books, and, as well, all changes to and the balance at the beginning of the period under audit. This information, in the case of a recurring audit, should be in the permanent file working papers or in the working papers for previous periods. A full and complete analysis should be made of all additions or deductions for the year, and the balances at the close of the audit period should agree or be agreed with the amounts appearing in the general ledger trial balance. Any unusual transactions or entries should be referred to the principal or to the accountant in charge of the audit.

Depreciation of Capital Assets

Depreciation for accounting purposes represents the exhaustion in useful life of fixed assets due to wear and tear, to the passage of time and, in its broadest sense, to obsolescence and inadequacy.

It is a cost of doing business and as such represents an expense which must be met before profits can be stated correctly and before the capital assets can be stated at their proper figure in the balance sheet. From an accounting standpoint it is not the sole purpose of the depreciation provision merely to record wear and tear or actual diminishing values but, partly at least, it represents the equalization of cost between different accounting periods in order to return to the enterprise the capital outlay in productive plant.

From the standpoint of the audit the adequacy of the provision for depreciation is one of the most difficult questions the accountant must decide. Every auditor should peruse and familiarize himself with such material as that referred to in *The Accountants' Index.** It is usually true that the adequacy of the depreciation provision can be determined only when repairs and replacements charged to operations are also considered. If capital expenditures are charged as operating expenses or if operating expense items are capitalized the percentages used in computing depreciation mean very little. Careful tests should be made of maintenance items and the policy of the client with reference to such matters should be carefully considered.

The information required may be scheduled separately or may be included in a property schedule, as illustrated in Exhibit 8, Appendix B. It should be as follows: —

RESERVE FOR DEPRECIATION

Items	Balance beginning of audit period	Provisions of period		Charges against Reserve	Balance at close of audit period
		Rate	Amount		
Buildings, etc.	$	%	$	$	$

It is usually preferable that, in one form or another, this be made a part of the cost-of-properties schedule in order to show most conveniently the net property values. In case of transfers between plants, branches or associated companies, a column for "Transfers" may be inserted before the final column.

A full and detailed analysis should be made of the periodic pro-

* See Bibliography, page 183.

vision and, as well, of all credits or deductions made to the account during the period. These sub-schedules will support and explain the summary figures which will appear in the above form. Full notes, also, should be made concerning depreciation charges or credits which are questionable or peculiar. For instance:

> "The plant, machinery and fixtures account is not relieved of machinery or fixtures which are fully depreciated. The rate of depreciation used is 7½% (on cost), but, by reason of this policy, the amount charged to depreciation each year is probably in excess of 7½% of the cost of machinery and fixtures not fully depreciated. The only time that credits are made to the asset account is when machinery or fixtures are sold, transferred or scrapped. Included in the account is machinery which was purchased in 1894-95 and which has been depreciated annually since then at 7½% (on cost), and which, therefore, was written off nearly 10 years ago."

The above statement throws light on the general policies of the company and enables the auditor more easily to determine what shall be his attitude and whether or not any qualification shall be made in the certificate to be attached to the client's balance sheet and statement of profit and loss.

Summary

The verification of capital assets, particularly the property accounts, may now be summarized, viz.:—

(A) For current charges to property accounts:

- (*a*) For land purchased examine the recorded title deeds, as well as the minutes of the board of directors and the stockholders.
- (*b*) For specific items of plant purchased examine the invoices, contracts and receiving records.
- (*c*) For construction by outside companies examine the contracts and invoices.
- (*d*) For construction by the company itself examine the material and labor tickets and verify the overhead charges. Show the overhead charges separately and determine, so far as possible, whether or not only direct burden was included therein.

(B) The current credits to property accounts should be fully described:

(*a*) For the sale of property or plant show separately the cost, selling price, depreciation applicable to the property, and the profit or loss.

(*b*) For machinery dismantled and/or sold show separately the cost value, the scrap value, the depreciation applicable thereto, and the book loss or gain.

(*c*) For transfers between plants show separately the cost, the new location of the machinery or equipment, and determine definitely whether or not the value transferred equals the previous book value.

(*d*) For fire loss show separately the cost, the amount recovered from insurance, and the final disposition of the difference.

(*e*) In case an account, such as tool account, has been inventoried, necessitating a reduction of the book value of the account, give a full description of the basis of inventory taking and of how the values used therein were obtained, both at date of audit and one year before.

(*f*) For credits for depreciation show the amounts by months, with reference to journal entries, etc.

All the above verification, as summarized, would probably be made by assistants other than, but under the direction of the accountant in charge of the audit. He should incorporate in the working papers his opinion as to capital expenditures made during the period, as to the adequacy of depreciation provisions, and of anything else which may arise that has a bearing on the audit.

There has been no attempt to exhaust what might be said on the audit of capital assets. Sufficient material has, however, been presented to enable the reader to grasp the importance of the problem and the methods of verifying and of scheduling cost of properties and depreciation reserves. The reader should also peruse *Approved Methods for the Preparation of Balance Sheet Statements* and other standard material.

CHAPTER V

Current and Investment Security Schedules*

Defined

In the verification of investments the auditor should first of all distinguish between permanent and current investments. Permanent investments include those in controlled or affiliated companies and comprise a part of the gross productive investment of a business enterprise; whereas current investments are usually comparatively small interests (although sometimes amounting to millions of dollars) representing either the temporary disposal of surplus cash or securities acquired in the payment of debts.

Current or temporary investments, states Sir Arthur Lowes Dickinson "have no relation to the business, and can be disposed of without in any way interfering with its earning capacity, other than the loss of the dividends thereon."** Permanent investments, however, because they "control some essential part of the activities carried on", must be held permanently or until the business changes its policies and purposes. This distinction is fundamental — in fact, so fundamental that "permanent" investments are usually grouped under fixed assets or as a separate heading in the balance sheet, whereas "current" investments are included with the current assets.

In the verification of securities permanent investments usually appear in the books and in the balance sheet at cost, whereas current or temporary investments appear in the balance sheet at current market values (if lower than cost), and in the books a reserve is ordinarily set up to take care of the shrinkage in values. A parent or holding company oftentimes controls so large a proportion of the securities of subsidiary or affiliated companies which are held as permanent investments that there is no real market quotation for them. Market quotations for a floating supply of five per cent. of the capital stock of a corporation, for instance, constitute no real price quotation on the total perma-

* See *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 10–11.
** See *Accounting Practice and Procedure*, p. 116.

nent investment of the parent company in that subsidiary. Perhaps the floating supply would have no market value if it were not for the control of the other company. The subject is too large and involved for a complete discussion in this chapter, and the reader is referred to other sources.*

Except as to the values at which the securities appear in the balance sheet, the verification of permanent and current investments is largely the same. The physical existence of the securities is proved in the same manner, that is, by inspection or by certificate from a trustee or pledgeé, and the same safeguards and similar records would be applicable for both. All securities should be examined by the auditor in person or must be confirmed by correspondence with the trustee or other holder thereof. In the case of investments in mortgages the auditor should ascertain that the mortgages have been properly recorded, that the insurance policies on the mortgaged property are in the possession of the company, and that all assessed taxes on the property are paid. If securities are hypothecated, that fact and the amount should be stated — probably by a note in the balance sheet.

Examination of Securities

Before beginning an examination of securities, the auditor should be furnished with a complete list of the securities which are to be verified. This list should be signed and dated by the auditor or by his assistant who makes the examination, and if more than one assistant takes part in the examination it should be recorded on the list which assistant examined the securities and by whom the items on the list were checked. Whenever practicable assistants should work in pairs while counting securities, one assistant examining the securities and calling off the particulars relating to each item to the other assistant who should determine the accuracy of the description shown upon the list. In case no list is furnished the second assistant should prepare one by writing down the details called to him. A schedule which may be used in the count of securities is discussed and illustrated later in this chapter.

The auditor should invariably decline to be left with securities in a room without a representative of the firm or company under

* See Dickinson, *Accounting Practice and Procedure*, pp. 82–7.
Note: In this respect the Treasury Department Regulations regarding Income and Estate Taxes are also of interest.

examination, and he must insist that such representative remain until the examination is completed and the securities are out of his possession.

Not infrequently errors are made in describing securities, and it is essential that the accountant examining the securities should make a careful comparison of the stock certificates or bonds with the list, being particularly careful to see that the full title of the security, the date of maturity, the rate and dates of payment of interest and any special information are correctly stated on the list. If the description is correct the item should be ticked (✓) in ink. It is important, in the case of registered securities, that the auditor ascertain that they are registered in the names of the owners or are endorsed in blank or accompanied by proper power of attorney and are good stock-exchange deliveries.

When large quantities of securities are to be counted, there is a temptation to count the bonds too hurriedly — that is, in cases where bonds are filed in packages of fifty or one hundred to the package, assistants have been known to run the edges and throw the package aside, assuming that all the bonds were of the same kind and denomination. In examining large quantities of bonds, a sufficient number of the bonds must be examined as to title, maturity, signature of trustees' certificate, etc., and whether or not unmatured coupons are intact, to satisfy the accountant in charge that the packages contain all and only the bonds that they are said to contain.

Speed at the expense of accuracy in examining securities may prove very disastrous to a firm. There are numerous obsolete issues of securities bearing titles somewhat similar to issues now outstanding, which could be bought up and substituted for genuine securities, and in some trust companies it would be possible for uncertified bonds to be sorted with those certified.*

Pricing Securities

Permanent investments, as already stated, cannot be valued merely by considering the market quotation for a small floating supply of the stock which is held as an investment. In determining the value of holdings in associated or subsidiary companies the auditor may adopt any one of several methods of verification. He may (*a*) accept such investments at their book value, specifi-

* See also Reynolds & Thornton, *Duties of the Junior Accountant*, pp. 53–7.

cally calling attention to the fact in the balance sheet or in conjunction with his report and certificate, or he may (*b*) examine the separate balance sheets of the one or more associated or subsidiary companies, specifically stating the basis of their preparation, or he may (*c*) make a partial or complete examination of the several companies' books. In the case of a financial or balance sheet audit, and when a consolidated balance sheet is *not* to be prepared, the second method of verification is probably most often adopted. When a consolidated balance sheet is to be prepared, the auditor will usually make a partial or complete examination of the several subsidiaries' books.

The investigation of the separate balance sheets of the companies should be made the basis of determining the general financial and earning condition of the companies whose stock is held and, as well, the book value of the shares held by the company under audit. Notes should be made in the working papers, and perhaps a schedule prepared, showing in comparative form the figures at which the investments in other companies are carried in the books of the holding company and also the book value of the stocks as shown in the individual balance sheets examined. Schedules *C* and *C-1*, Appendix A, illustrate the verification of such investments, with notes concerning the method adopted for valuing the securities.

In verifying either investment or current securities, brokers' advices for purchases or sales should be seen, and the auditor should ascertain definitely whether all proceeds have been properly accounted for or not. It should be understood that the physical inspection or count of the securities will be made at one time — preferably on the closing day of the period under audit or the first day of the following period — and that all additional verification will ordinarily be made at such later date as may be convenient. When securities are held by a trustee or other pledgeé a certificate should be obtained to verify the holdings as of the exact date of the count. All certificates out for transfer should be verified by correspondence with the transfer agents. It is not improbable that the market value of current marketable securities and the dates of dividend and interest payments will not be ascertained until after the auditor returns to his own office and has available the Commercial and Financial Chronicle or some similar source of information. The verification of sundry

marketable securities and the information to be included in the working papers are illustrated by Schedule *G*, Appendix A.

Special Funds

Special funds for bond or stock redemption, or for any other special purpose, on deposit with trustees should be verified by certificate from the trustee. Bond or stock redemption agreements should be considered by the auditor when making the verification of these items in the balance sheet, and any provisions in such agreements which relate to funds to be deposited with trustees should be carefully noted in the working papers. When funds are in the possession of other persons they should be verified as are any other cash balances or securities held.

In case a company carries its own compensation and liability insurance, it is usually required to deposit with an officer of the State gilt-edged securities to cover the necessary provision. If such condition is found the existence of the bonds should be verified by correspondence with the state officer holding the securities.

The working schedules (see Schedule *B*, Appendix A) should show the balances in such funds at the beginning and close of the period under audit, with all changes, either additions or deductions, made to the accounts during the period. Vouchers, notices and other documents should be examined for approvals, etc., and any information which has a bearing upon the verification should be carefully recorded in the working papers.

Working Schedules

Additional working schedules which may be used in the analysis of marketable securities and permanent investments will be shown. In the case of a large holding company the owned stock of eight subsidiaries was scheduled as follows: —

Stock of Subsidiaries, December 31, 1922

Name of subsidiary	Total capitalization		Shares owned by "X" Company	Carried on books at		Remarks
	Shares	Amount		Per share	Amount	
		$		$	$	

The above schedule was supported by another schedule, showing separately for each subsidiary a description of the securities, the number, par and total value of shares owned at the beginning of the year, the additions and/or deductions (red) during the year, the per cent. and amount of dividends paid, and information for the end of the year similar to that for the beginning.

The above schedules, obviously, related to "permanent" investments. In the audit of a similar company schedules were prepared, by classes, for the marketable stocks and bonds held as current investments, as follows:

SUMMARY OF CURRENT INVESTMENTS, DECEMBER 31, 1922

Description	Book value	Market value	Reserve or write-off	Remarks
	$	$	$	

So far as the balance sheet and the loss-and-gain statement are concerned, it is immaterial whether a reserve is set up or the securities are written down. However, the cost prices should be available in order to determine the profit or loss on the securities when they are sold, and for this reason it is preferable to make any adjustment for market fluctuations through a reserve account. In the valuation of current investments it should be remembered that ordinarily "cost or market, whichever is lower" is applicable. This more or less arbitrary rule makes for conservatism, for (*a*) in case the market value of the securities has advanced it precludes taking up in the accounts an unrealized and perhaps never-to-be-realized profit, while (*b*) if the market value of the securities has declined it eliminates the possibility of overstating liquid asset values in the balance sheet. The rule is well established in practice and in financial circles, while the Federal Reserve Board in its bulletin goes so far as to say that such a reserve for market fluctuations *must* be — not should be — set up.

The current investments' summary schedule shown above was further supported by detailed schedules somewhat as follows:

Description:
- Name of security
- Par value of shares
- Interest rate
- Coupon date

On hand at beginning:
- Shares or par
- Book value
- Reserve

Bought or sold (red) during period:
- Shares or par
- Amount paid or received (red)
- Book value
- Profit or loss (red) on sale

On hand at end:
- Shares or par
- Examined by
- Book value
- Market value at end —
  - Rate
  - Amount

Reserve required

Revenue

Interest accrued (receivable)

This schedule was subdivided for the various classes of stocks and bonds, viz.: domestic and foreign stocks, foreign government bonds, United States bonds, state and municipal bonds, railroad and industrial bonds, etc. These schedules were also prepared with the income tax requirements in mind. They should, preferably, be prepared by the client toward the end of the fiscal year and a copy should be presented to the auditor upon beginning the audit. The accountant's copy may then be used in the count of securities. The schedule further permits the checking of revenues, accruals, reserves, profits and losses which may be cross-indexed to the various schedules which they affect. It can usually be prepared directly from the client's records and requires no further analysis or subdivisions.

The auditor should be sure that accrued interest at the date of purchase is not carried as part of the cost of bonds. Such accrued interest should be set up in the books separately and should be

written off against the first interest collected from the respective investment. The income which should have been received from investments should be agreed with the Profit and Loss statement, and the income should be thoroughly tested with the cash book and bank statements.

In verifying the securities, as previously stated, the leading schedule should state definitely where, by whom and at what time the securities were counted. This statement should appear as a part of the schedule, preferably at the top of the exhibit, somewhat as follows:

"Securities counted January 2, 1923, at 10:00 A.M., by A and B, accompanied by and in the presence of Y, at the vaults of the M. Safe Deposit Company."

A form of schedule for sundry marketable securities, somewhat different from that shown as Schedule *G*, Appendix A, is given below. The kind and volume of securities to be accounted for will always largely determine the form of schedule to be used.

Count of Securities, January 2, 1923, 10:00 A.M.

Certificate number	Description of securities	Number of shares or par of bonds	Total par value	Interest or dividend rate	Coupons attached (✓)	Transfer O. K., securities seen, etc. (✓)
			$			

Other schedules might also be presented for recording both permanent and current investments, but those shown above will suffice to show what is needed and will tend to emphasize that individual conditions must be weighed to determine the exact form a schedule will take when used in the security verification. Each verification will necessarily vary slightly from all others, and each set of schedules should be correspondingly complete and should show unmistakably what verification has been made; yet no schedule should be too time-consuming in its preparation.

CHAPTER VI

INVENTORIES*

Importance of Inventories

Inasmuch as the annual or periodical statement of profit and loss prepared for manufacturing or mercantile concerns will not be accurate unless the inventory is accurate both as to quantities and unit values, this part of the audit verification should receive very careful consideration. In the case of a first audit the inventory at the beginning of the period should receive the same attention as that at the close, and the auditor should ascertain to his entire satisfaction whether both inventories were taken on the same basis or not.

The Auditor's Responsibilities

The auditor's duties in regard to the inventory verification fall rather naturally into three divisions, namely, his responsibility, ethically if not legally, regarding

(*a*) clerical accuracy,
(*b*) basis of pricing, and
(*c*) quantities, quality and general condition of the stock.**

As to the first of these duties the auditor is professionally guilty if there be even *slight* negligence, and he must satisfy himself by thorough tests that no material error exists as to extensions, footings and summaries. He must also see that the summaries have been correctly transcribed in the books.

As to the second division of the verification the auditor must do all that an ordinary, prudent, skilled practitioner would do; he should be held accountable for the *reasonable* skill and ability of a professional auditor. He should ascertain definitely what basis of valuing the inventory has been used, and he should examine such invoices, current market quotations, contracts of purchase, cost-finding methods in use, etc., as will fully satisfy him concerning the basis of pricing all inventories. In this respect the Federal Reserve Board bulletin states, p. 12,

* See *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 11–4.
** See JOURNAL OF ACCOUNTANCY, November, 1914, pp. 333–41.

"(13) The auditor should satisfy himself that inventories are stated at cost or market prices, whichever are the lower at the date of the balance sheet. No inventory must be passed which has been marked up to market prices and a profit assumed that is not and may never be realized. If the market is higher than cost, it is permissible to state that fact in a footnote on the balance sheet."

As regards the quantities, quality and general condition of the stock, the delinquent auditor will be guilty only if there be *gross* negligence. He is not an appraiser of values, nor can he be held responsible for the quantities on hand at some prior date. He must satisfy himself so far as possible as to the quantities and condition of stock on hand — he should make "diligent inquiries as to the manner in which the stocks have been ascertained and reported, and whether or not unsalable, deteriorated and inactive stocks have been so listed and appropriately valued"*, and he should obtain a certificate (see Schedule *D-1*, APPENDIX A) from responsible officers as to the quantities, quality, and general condition of the stock. Anything less than this on the part of a skilled auditor would constitute moral *gross* negligence.

Verifying the Inventories

The verification methods outlined in *Approved Methods for the Preparation of Balance Sheet Statements* will not be repeated or summarized here. This material is available to all who may be interested in it and every aspiring assistant *should master thoroughly the procedure outlined.* Observe that in checking extensions merely checking all inventory extensions over a specified amount — for illustration, all items over $50 — does not prove the inventory correct. Large errors may exist in the smaller amounts as, for example, an item of $1,000 may be written as $10.00. Consequently, the smaller items should be thoroughly tested in order that under-valuations may be detected. A general scrutiny of the quantities and amounts will usually disclose any relatively large errors in the valuation.

For auditing purposes inventories may be divided into several general groups, and the procedure for verifying them will ordinarily vary somewhat. The groups roughly are as follows: —

* See JOURNAL OF ACCOUNTANCY, Vol. XVIII, November, 1914, p. 337.

(*a*) Raw Materials and Purchased Parts, commonly known as Stores, which include all materials that are put into process of manufacture and physically become a part of the finished product.

(*b*) Supplies, which include all materials that are put into process of manufacture but are consumed during the manufacturing process and generally known as indirect materials; also, the materials which, in general, are used to pack and ship finished product.

(*c*) Work in Progress, which consists of those raw materials which have been put into process of manufacture and all productive labor applicable thereto, with a fair proportion of the factory expenses, including supplies.

(*d*) Partly-finished Stock, which includes finished parts not yet assembled into finished product. This group may, if preferred, be classified as work in progress.

(*e*) Finished Product or Stock, including all product ready for shipment. In case of a manufacturing concern this will ordinarily represent *manufactured* stock; in a mercantile business it will be *purchased* stock.

General Procedure — Materials and Supplies

In the audit of inventories of raw materials, supplies or purchased stock, the auditor should first inquire into and familiarize himself with the general procedure followed by the company in the taking of the physical inventory (assuming that such has been taken), with the receiving system and records, with the methods of storing, requisitioning, recording receipts and issues of stores at the stores room, and with any other details concerning the procedure in accounting for purchased stores or stock.*

The auditor should next secure the original stock sheets, as set forth in the bulletin of the Federal Reserve Board, and should retain possession of these records until the final adjusted inventory figure is determined. As the rough sheets are usually in pencil he should be careful that no one obtains them and changes footings, etc., until he has completed his work upon them. Every precaution should be taken also to uncover the destruction of any rough pencil inventory sheets and the resulting elimination of a part of the inventory from the typewritten sheets and from the

* The terms "stores" and "stock" are here used in accordance with the practice evolved by scientific management — "stores" meaning raw materials to be converted into manufactured product, or "stock."

stores ledger accounts. Careful tests should be made of typical products as to quantities that should be on hand at the close of the period under audit — taking into consideration the quantities on hand at the beginning of the year, plus quantities purchased, and less quantities used, returned or sold. If substantial errors are found, care should be taken to secure explanations, and the auditor should be entirely satisfied that there has been no intentional manipulation of the inventory records.

Other important points concerning the inventories of raw materials and supplies may be summarized, viz: —

Bulk Raw Materials, such as scrap iron, pig iron, ore, coal, etc., are seldom inventoried by actual weight or measurement but are taken into the inventory at the balance sheet date on the basis of the book record. In this case it is necessary, owing to the importance of such values in the inventory, to make a careful check of carload lots constituting original stock files. Also the amount of and the reason for any adjustments appearing during the year as piles are exhausted should be carefully considered.

Spare Parts of Machinery, if important in amount, should be segregated for the purpose of discussing with the principal with whom the balance sheet is to be taken up the propriety of retaining such materials as current assets. Cases have been known in which twenty per cent. of the entire raw material inventory was composed of items many of which had already been used and returned to stores.

Obsolete or Depreciated Goods, while less frequent in raw materials and supplies than in the case of work in progress or finished stock, must be investigated carefully. These would usually be evidenced, in case of stores records, by accounts through which no entries or very few entries have been passed during the period under audit. The auditor should be satisfied that the valuation of such materials is conservative and is based upon the probable sale value.

Receiving Tickets for several days before the close of the period covered by the audit should be examined to see that all materials reported as received have been taken up in the inventory and that the corresponding liability has been entered in the books.

Cash Discounts on purchased materials should be deducted from the invoice cost value, unless such procedure is contrary to the custom of the industry in which the company is engaged.

Consigned Materials sent to other companies, upon which work is to be done and the materials then returned to the company under audit, should be verified as to quantity and condition by certificate from the company in whose possession the goods are.

Consigned Materials on Hand are the property of others and should be verified by certificate obtained from the owners thereof. Such materials must be excluded from the inventory.

General Procedure — Work in Progress

The verification of prices at which the work in progress is included in the inventory should include a general examination and test of the cost-finding system in use. The auditor should determine how the costs are compiled and should ascertain whether the cost-finding system is interlocked with the financial accounting or not. Only when the cost-finding and financial accounting schemes are interlocked can the costs definitely be proven correct, although trustworthy costs are often compiled without any such complete tie-up with the financial bookkeeping records. This will be true not only when "post mortem" costs but also when "estimated" or "pre-determined" costs are used.

Approved Methods for the Preparation of Balance Sheet Statements states, pp. 12 and 13, with reference to the verification of work-in-progress inventories: —

> "(7) When the cost system of a company does not form a part of the financial accounting scheme there is always a chance that orders might be completed and billed, but not taken out of the work-in-progress records. Especially is this the case when reliance is placed on such records to the extent that a physical inventory is not taken at the end of the period to verify the information shown therein. In these cases the sales for the month preceding the close of the fiscal period should be carefully compared with the orders in progress as shown by the inventory, to see that nothing that has been shipped is included in the inventory in error. Cost systems which are not coördinated with the financial accounts are unreliable and frequently misleading. Special attention should be called to every case in which the cost system is not adequately checked by the results of the financial accounting.

"(17) In verifying the prices at which the work in progress is included in the inventory, a general examination and test of the cost system in force is the best means of doing this work satisfactorily. In a good cost system little difficulty will be found with the distribution of the raw materials, stores and payroll, but the distribution of factory overhead cost is one that should receive careful consideration. The main points to be kept in view being:

"(*a*) That no selling expenses, interest charges, nor administrative expenses are included in the factory overhead cost.

"(*b*) That the factory overhead cost is distributed over the various departments, shops, and commodities on a fair and equitable basis."

Production or shop orders, after the general method of determining costs has been ascertained, should be examined and tested and a number of typical orders should be traced to their completion in order to learn whether or not relatively large adjustments have been necessary which might alter the value of the work in progress at the date of the balance sheet. Both in the case of the work in progress and the manufactured stock accounts an analysis of the Reserve for Burden Adjustment, Reserve for Cost Fluctuations or similar accounts in the ledger will reveal how accurately the labor and materials have been charged to the production orders, and such accounts will also show the under- or over-absorption of burden expense. This will go far in aiding the auditor to determine the approximate accuracy of the finished and unfinished manufactured inventory.

The importance of knowing how costs are compiled and of having a sound and practical knowledge of the principles and elements of manufacturing costs cannot be over-emphasized. Such knowledge is necessary before the work in progress or finished stock prices can be properly checked. However, should an assistant intrusted with the inventory verification lack such essential knowledge it were better both for him and for the firm with which he is affiliated that he admit frankly his inability than make a futile and inconclusive verification and try to foist the results upon an innocent principal as satisfactory.

One may go a step farther and say that an accountant in charge who, for any reason, delegates the verification of work in progress

and finished stock prices to a junior and does not exercise careful and constant supervision of the work which the junior is doing is negligent almost to the point of dishonesty and should be severely censured.

As in the case of materials and supplies, the arithmetical accuracy of the work in progress must be verified. Footings and extensions should be checked, and the accuracy of the quantities reported should be tested. Full comparisons of the work-in-progress inventories should be made for two or three fiscal closings to be sure that no old orders are being carried therein unclosed; and the quantities shown should be examined in a general way, at least, to see that none is obviously overstated. The auditor in charge should ascertain, so far as possible, whether the work in progress or completed parts are fairly well balanced, and, if not, the extent to which they are not.

If the finished price is used as the basis of valuing the work in progress, and the percentage of such work completed is estimated, it is not necessary to ascertain separately what proportion of such work in progress is represented by materials, by productive labor and by burden or overhead expense. The basis used in the pricing should be ascertained before undertaking the actual verification. If the percentage completed basis is used, the auditor in charge should examine, or should supervise the examination of, the subsequent output in order to determine whether or not the estimate of work completed was approximately correct, as borne out by the length of time or by the amount of additional charges which were necessary to complete the work.

When shop orders are used the exact book cost of the work in progress may be obtained therefrom. However, since ordinarily the audit will begin some weeks after the close of the fiscal period, a number of the larger shop orders should be traced to completion in order to ascertain whether or not any large adjustments were necessary which might have affected the cost of the order on the date of the balance sheet. A general inspection should also be made of a number of the completed orders to see if it had been necessary ordinarily to adjust the costs at the completion of an order. The effect of such adjustments upon the work-in-progress inventory of the date of the balance sheet should be inquired into carefully and should be noted in the working papers.

It may be that in pricing the raw materials inventory errors

will be found which would affect the work-in-progress values. Furthermore, unabsorbed overhead should ordinarily not be included in work in progress. It is also well, before passing the work-in-progress inventory, to scrutinize the manufacturing orders for repairs or equipment or other capital additions in progress. As repeatedly stated, all such items, if of any relative importance, must be eliminated from the inventory. Journal entries should be prepared for all errors or adjustments of relative importance which have developed.

General Procedure — Finished Stock

The verification of purchased stock would be similar to that of raw materials or of purchased parts. For manufactured stock or parts the general procedure would be largely the same as for work in progress.

For manufactured stock the general methods of cost finding must be known, and the relation between the cost-finding methods and the financial accounting should be ascertained. The arithmetical accuracy of the inventory must be proved; tests should be made to see that productive labor and requisitioned materials are correctly distributed to orders; and an analysis should be made of the burden expense to see not only that all burden has been included therein and is being distributed by some fair means to the product, but also that no selling or administrative expense, interest or other extraneous items are included in the burden. As stated above, a thorough analysis should be made of the "burden adjustment" or similar account to determine the general accuracy of the manufacturing charges made to product.

Inactive stock cards should be examined; billings to customers at the close of the audit period should be checked with the shipping records to see that all goods billed before the close of the year were excluded from the inventory (if not actually shipped); special sales contracts for the sale of large quantities of goods at special prices should be considered and the contract sale price compared with the production cost of the goods. The contract sale prices should be well in advance of the production costs, after making allowance for cash discounts. In case sales contracts call for delivery of goods at prices below the present inventory figures, full comments, including estimated losses resulting therefrom, should be made.

In comparing these later selling prices with inventory prices it is also well to observe whether or not there are any special customers buying on a large scale who receive special price concessions. In the audit of a large tire manufacturing company, for instance, it was found that special contracts were in force with the manufacturer of a well-known automobile, to whom sets of tires were sold very much below the regular trade prices. This was scheduled as follows (the illustrative figures are stated on the basis of ratios): —

Description	Cost	Special selling price	Regular selling price
Set of 30" x 3½" tires, consisting of two non-skid fabric clinchers, two plain fabric clinchers and four grey tubes. .	1.000	1.294	1.656
Set of 34" x 4½" tires, consisting of two ribbed cord tires, two non-skid cord tires, and four grey tubes..........	2.000	2.540	4.566

By determining the approximate percentage of the product which is sold on such contracts, the percentage of profit or loss realized during the period under audit may be more easily and satisfactorily explained. Based upon the estimated production for the following period such figures also serve as a valuable barometer of the earnings of that period.

Consideration should be given to the inventory quantities, as in the case of raw materials, and the auditor should satisfy himself by every means practicable that records of stock have not been altered or destroyed and the physical inventory has not been incorrectly stated. Wherever possible tests should be made of the larger items, thus: quantities on hand at beginning of period, plus net quantities produced or purchased during the period, less net quantities sold during the period, should approximately equal the quantities on hand as shown by the inventory. If an approximate proof cannot be obtained in this way the auditor should insist upon full and satisfactory explanation from the client.

Inquiry should be made concerning the treatment of obsolete completed stock and obsolete parts. It should be determined that none is included in the inventory at full cost value, and a certificate should be obtained to this effect. Full notes of all information obtained regarding obsolete stock and its treatment in the accounts should be included in the working papers.

Variations in the overhead expense rates between different audit periods should be explained to the satisfaction of the auditor, and, as already stated, notes should be made concerning the disposition of unabsorbed debit or credit balances of the burden expense accounts.

As a final verification or test of the finished stock inventories the auditor should extend the larger items at sale price and determine what ratio the difference between the inventory value and sales value bears to the sales value. If the finished stock is priced at cost, and if allowance is made for any changes of relative importance in either the sales or cost figures during the period under audit, the ratio will approximate the ratio of gross profit obtained by the company during the period. If this ratio is not obtained the auditor should be fully satisfied that valid reasons exist for a different ratio.

No Cost-Finding System

When no cost-finding system is in use the verification of the finished-stock and of the work-in-progress values depends largely upon the degree of intelligence and the ingenuity of the auditor. The most common-sense and satisfactory test, perhaps, is to obtain from the company its specification costs and ascertain the amount of the opening inventory, together with the period's expenditures for materials, labor and expenses. From the sum of the opening inventories, plus the total expenditures of the year, deduct an amount computed by multiplying the *volume* of sales by the *specification* cost. The balance remaining should be the inventory at the date of the audit, and it is for the company to explain any serious discrepancies. This method has the distinct advantage of placing the burden of proof on the company rather than upon the auditor.

Furthermore, when such conditions exist, most concerns know fairly well the material cost going into the product, and oftentimes a piece-rate wage cost may be added for all processes performed to the date of the audit. A flat percentage is then usually added for burden, and the work-in-progress costs for inventory purposes are computed.

The general nature of the products must also be considered. In an automobile plant, for instance, where work in progress consists largely of parts which can be physically inventoried, the

problem of establishing inventory values is easier than it is, say, in a glue factory or a sugar refinery.

Certificates as to the quantities, values and condition of the inventories should be obtained from responsible officers, and the auditor should use every means possible to satisfy himself of the fairness of the inventory figure in the balance sheet. The ability on the part of the auditor to understand the particular situation, however, will be his greatest protection and his best asset.

Where to Obtain Market Quotations

In the verification of inventories or other assets for which price quotations are needed, current prices may be obtained from such leading business and financial organs as the following:

- Commercial and Financial Chronicle
- New York Journal of Commerce
- Market Reporter (prepared by the Bureau of Markets of the Department of Agriculture)
- Bradstreet's

The Commercial and Financial Chronicle, and its Supplements, is undoubtedly the best source from which to verify security prices, while the New York Journal of Commerce and the Market Reporter are especially good for commodity prices.

Other special commodity prices may be found in such well-known publications as the following:

- American Lumberman
- American Machinist (iron, steel, shop supplies, small tools, etc.)
- Brick and Clay Record (brick, tile, etc.)
- Building Age (building materials)
- Coal Age (coal, etc.)
- Engineering and Mining Journal (gold, silver, and other metals)
- Iron Age (iron ore, pig-iron, iron, steel, etc.)
- Motor Age (auto parts, etc.)
- National Petroleum News (refined products)
- National Provisioner (curing materials, meats and by-products)
- Oil and Trade Record
- Oil, Paint & Drug Reporter (paints, oils, varnishes, chemicals, fertilizing materials, etc.)

Oil Trade Journal (crude and refined products)
Paper (paper stock, pulp, etc.)
Power (plant and electrical supplies)
Textile World Journal (textiles and textile materials)

These magazines should be available at any Public Library current periodical room, and many of them will probably be in the possession of local offices. It is desirable to have available in the auditor's office issues of such magazines which contain quotations for closing fiscal dates, as, for instance, June 30th or December 31st.

It is of special importance that the greatest care be exercised in obtaining price quotations from periodicals, for in not a few cases have assistants made themselves look foolish in the eyes of clients, merely because the quotation they were endeavoring to use was for *an entirely different grade of commodity* from the item appearing in the inventory. It is impossible at times to obtain the quotation desired. The practical thing to do in such a case is to take the invoice purchase price of the item actually appearing in the inventory and compare that with the quoted price of other grades of the same commodity at the date of purchase of the item in the inventory. Then by finding quotations for some of the other grades of the commodity at the last day of the period under audit, and by comparing these prices with the quoted prices for the same grades at the time of the purchase of the item in the inventory, the auditor will be able by comparison to find the approximate value of the grade included in the inventory.

To illustrate, on a certain date Para rubber was quoted as follows: —

Up-river	22½¢ lb.
Island fine	21½¢ "
Island coarse	10¼¢ "
Caucho, ball, upper	12½¢ "
Caucho, ball, lower	11 ¢ "
Etc., etc.	

Suppose that on this date the "X" Company purchased a lot of caucho, ball, upper @ 12½¢ per pound. At the close of the "X" Company's fiscal year, December 31, 1922, let it be assumed that there was a considerable amount of this rubber on hand, but that there had been no quotations for some time. However, rubber prices as a whole showed approximately a 20 per cent. decline

since the date on which the caucho was purchased. If the item in the inventory was in good condition, it would be fair to assume for it a value of approximately 10¢ for inventory purposes. A little thought in this regard will impress any assistant with the importance of being extremely cautious and very certain of his quotations.

Physical Inventories

As has been stated previously the auditor should ascertain, when verifying inventories, the date of the last physical inventory. Schedules should be prepared showing in summary and usually somewhat in detail a comparison between the book and physical inventories at the date of the physical inventory. Such a summary schedule for a large company manufacturing boilers and other heavy machine parts appeared as follows (the figures are assumed): —

Account No.	Name of material	Per Ledger	Per Physical inventory	Inventory shortage	Inventory excess
5346	Billets	$ 185,904.22	$ 163,209.87	$ 22,694.35	$
	Etc., etc.				
	Totals	$1,197,327.62	$1,122,202.00	$114,929.56	$ 39,803.94
	Net shortage		75,125.62		75,125.62
			$1,197,327.62		$114,929.56

The above physical inventory was taken as of October 31, 1921; the audit was as of December 31, 1921. Thus, although these values were not the values used for balance sheet purposes, the physical inventory would serve as a valuable check upon the book inventories.

On the other hand, *the value of a physical inventory should not be over-emphasized.* If the physical inventory has been taken hurriedly or by inexperienced helpers, it is apt to be very inaccurate, and large adjustments made in the books to bring the books into agreement with the physical inventories may have to be reversed when the next physical inventory is taken. *If there is an up-to-date and scientifically kept book inventory, it will usually be found more trustworthy than any physical inventory that is likely to be taken.* This is particularly true where large quantities of uniform materials, such as pig-iron, coal, iron ore, etc., comprise the inventory; in other cases, such as an automobile factory, where the

parts can be counted with reasonable ease and accuracy the physical inventory is quite important.

Depreciation of Inventories

When it is necessary to depreciate inventories, by writing down the cost values to current market values, which required such special attention for fiscal years ending December 31, 1920, or thereabouts, a complete analysis of the provision for depreciation should be made. The information obtained from such an analysis may be scheduled somewhat as follows, the form of schedule varying (particularly as to quantities) for different types of business. This form, with slight changes, was used for a large textile mill: —

Provision for Depreciation of Inventories, December 31, 1920

Items	Pounds on hand, December 31, 1920					Deduct unfilled orders (lbs.)	Balance (lbs.)
	In stock	On memorandum	On consignment	Goods returned	Total		

Book value		Average market value			Differences		Remarks
Per pound	Total amount	Source of quotation	Price per pound	Total amount	Market value over	Market value under	
$	$		$	$	$	$	

The column headings are a sufficient explanation of the work which is to be done.

Merchandise in Transit

Merchandise in transit must be very carefully verified, and the information so obtained should be scheduled somewhat as follows: —

MERCHANDISE IN TRANSIT AT DECEMBER 31, 19——

Date of invoice	Vendors	Description of materials					
		Items	Grade	Quantity	Date received	Unit price	Invoice amount
						$	$

Vouchers paid		Average market value				Remarks
Date	No.	Source of quotation	Unit price	Amount	Amount over or under (red) cost price	
			$	$	$	

The invoice amounts should be traced to the vouchers (all amounts or thorough tests), from which should also be obtained the invoice date, the voucher number and the date of payment.

It should also be noted if at the time of the audit the vouchers had been paid, and if such payment was noted thereon. The auditor should check the vouchers, if possible, to the letters enclosing the vouchers and dated prior to the date of the balance sheet, and designate the vouchers as audited and approved.

It is very important that the in-transit items of any size should be checked to the receiving tickets issued subsequent to the date of the balance sheet and to the inventory card entries for the month following the close of the period under audit. Ordinarily no freight or other charges but only the invoice figures should be included in the in-transit amount. The in-transit miscellaneous expenses should be set up separately.

Merchandise Shipped but not Billed

As in the case of merchandise in transit a record should be made of all goods actually shipped in the previous period (the period covered by the audit) but not charged to the customer until the current period (when the audit is being done). Schedules should

be prepared summarizing the work which has been done and containing information somewhat as follows: —

MERCHANDISE SHIPPED BUT NOT BILLED

Invoice No.	Customer and address	Date charged out	Date goods were shipped	Description of goods — pounds, yards, etc.	Unit price	Amount
					$	$

Purchase Contracts

Contracts for the purchase of materials, when for relatively large amounts or when the contract price is considerably above the market price of the materials, at the closing date of the period under audit, should be noted in the working papers, together with the following information (to be prepared in schedule form):

(*a*) Date of the contract
(*b*) Number of the contract
(*c*) Parties to the contract
(*d*) Materials covered by the contract, with quantities, prices, and similar information
(*e*) Terms of payment and delivery, freight, etc.
(*f*) Partial deliveries made up to the close of the period under audit
(*g*) Balance of quantities, and
  (1) Unit prices and values as shown by the contracts
  (2) Unit prices and values at market quotations
(*h*) Reserve, if any, needed to cover difference between contract and market price

The information called for by the schedule is suggestive of the records, papers, etc., to be examined and the procedure to be adopted. Contracts, receiving records, invoices and correspondence, and prices as given in trade papers should be examined in detail or thorough tests should be made.

Partial deliveries on account of purchase orders should be verified by correspondence with the vendors. Advances for purchases contracted for ordinarily *should be segregated and shown separately* in the balance sheet, but under the heading of Inventories.

Price Testing

Typical schedules which may be prepared with reference to price testing are shown as *D-12*, Appendix A, and as Exhibits *11* and *12*, Appendix B. In each case the assistant making the test should ask the auditor in charge for information as to the percentage of prices appearing in the inventory which is to be verified. Very substantial tests ordinarily will be a satisfactory verification; the schedules prepared should show conclusively what has been done in this respect.

As stated in the Federal Reserve Board Bulletin, inventories must be priced not to exceed cost or market, whichever is lower at the date of the balance sheet. Inventories must not be passed which have been marked up to market prices and "a profit assumed that is not and may never be realized." The bulletin adds that "if the market is higher than cost, it is permissible to state that fact in a footnote in the balance sheet." This rule may appear more or less arbitrary and it has been attacked a number of times by certain writers whose knowledge of accounting is probably more theoretical than practical. As stated in Chapter V with reference to current marketable securities, however, such a rule means a conservative statement of financial position and makes impossible the inclusion in the accounts of a fictitious profit which has not and perhaps never will be realized. The rule has the sanction of the very best practice and is thoroughly established in both business and financial circles.

In the case of raw materials, supplies or purchased stock the invoice and market prices may include freight and handling charges in addition to the invoice cost. It is always advisable, in pricing purchased, partly manufactured or manufactured goods, to discuss with the proper officer the basis of the inventory pricing in order that no time may be lost. This is particularly desirable for in-progress or manufactured goods, and also when average stores ledger prices are used as a basis for valuing materials or supplies.

After the pricing is completed entries should be drafted in journal form to adjust the accounts for any errors of relative importance. A general scrutiny should also be made of the inventory sheets in order that large quantities which appear excessive or obviously overstated may be brought under notice and may be discussed with those in authority.

Errors in Inventory

To record the errors found in the inventory a schedule may be prepared similar to that shown as Exhibit *10*, Appendix B. This summary of errors may be further supported by subsidiary schedules somewhat as follows:—

Errors in Inventory

Inventory sheet No.	Items	Per inventory		
		Quantities	Unit price	Amount
			$	$

December 31, 1922

Should be			Difference		Remarks
Quantities	Unit price	Amount	Increases	Decreases	
	$	$	$	$	

The net increase or decrease which is necessary to correct the book values, and would be carried forward to the summary schedule, is the important figure obtained from the above detailed schedule, but the detailed information contained in the schedule gives the auditor his tie-up with the inventory sheets of the client.

Certificates of Inventories

It is stated in *Approved Methods for the Preparation of Balance Sheet Statements*, page 11, that the auditor in the verification of inventories should obtain "a certificate from a responsible head as to the accuracy of the inventory as a whole." Such a certificate is typified in Schedule *D-1*, Appendix A, and should be included in all working papers if inventories form a part of the verification. Quantities, condition of materials and stock, total values agreeing with the balance sheet figure and any other pertinent information should be included in the certificate. The certificate

should be signed by those who have first-hand knowledge of and are directly responsible for the accuracy and pricing of the inventories.*

Statement of Work Done

In addition to the preparation of schedules, etc., full comments should be made regarding the verification with reference to each schedule, and a full statement of work done should be prepared (see Schedules *D-13* and *D-14*, Appendix A) and should be included in the inventory file. All interesting points should be subject to comment — such as letters seen regarding inventories, contracts, special conversations with people about the plant, reasons for abnormally high or very low manufacturing costs, etc., and in fact anything that reveals tendencies or general policies of the business as to inventories. Commitments should be given special attention, probably by the auditor in charge, and the cost-finding methods should be described briefly. As stated in Chapter IV, *construction materials must be eliminated from the inventories and be included in cost of properties.*

As has already been emphasized, thorough tests of inventory prices should be made and included with the schedules. This schedule should show very clearly just what verification of prices has been made. The kind and grade (or other description) of materials should be noted, with unit costs and market prices actually used in determining the value of the inventory, and with the source of market price given. Also the unit price at which the goods were sold during one, two or three months after inventory should be included. Later selling prices oftentimes go far in revealing whether or not the inventory prices were fair, and they are, therefore, particularly worthy of the auditor's careful scrutiny.

The Schedules

As stated in the introduction to Appendix A the methods of verifying inventories, particularly inventories of work in progress, will differ considerably in different industries. Yet, even so, the general auditing procedure will vary only as the production processes and cost-finding methods vary. The working schedules shown in Appendix A (Schedules *D* to *D-14*, inclusive) typify the general auditing procedure.

* *Note:* In this respect the reader should also be familiar with the form of inventory certificate required for income-tax purposes.

First in importance, perhaps, is the summary schedule (Schedule *D*) in which are given the main divisions and items making up the inventory amount in the balance sheet. This schedule should be prepared in comparative form. Immediately following the summary schedule ordinarily will be the certificate of inventory (Schedule *D-1*) and then the various sub-schedules which analyze and support to as great a degree as desired the items and amounts appearing in the summary schedule. Some auditors prefer to place the statement of work done on inventories immediately after the certificate and preceding the sub-schedules. A careful study of this group of schedules in Appendix A will, it is believed, make quite clear to the reader the information desired and the procedure which is necessary in the ordinary inventory verification. The reader should observe in each schedule the auditor's check-marks, which signify that cross-additions, extensions, totals, etc., have been found correct. The reader should also observe Exhibits *9* to *12*, inclusive, in Appendix B. Whatever forms of schedules are used, they should include a complete statement of work done.

Conclusion

In concluding this chapter it is proper again to point out the importance of inventories in the audit of manufacturing or mercantile concerns, for a correct inventory is absolutely necessary for the proper determination of the annual profit or loss, and consequently of the financial condition of the business under audit. And yet, as has been stated, there is no item appearing in the books of a business concern demanding so varied and so skillful treatment as the inventory item. A knowledge of the manufacturing processes and familiarity with cost-finding procedure are essentials the auditor must possess if he is to be sure of himself and certain of the correctness of his verification. Schedules, certificates, statements of work done, etc., must be carefully prepared and the auditor must exercise great alertness and sound judgment with regard to many points which will continually arise. This will require of the auditor not only technical efficiency but as well an understanding of the problems and the organization of the client's business, and the ability to deal tactfully with those members of the client's staff who are responsible for the inventory records and valuations.

CHAPTER VII

Receivables and Cash*

The System of Accounting

Inventories and current marketable securities having been discussed, this chapter will deal with those current assets known commonly as receivables and cash. The receivables comprise all types of accounts receivable, including small items of accruals, and notes receivable from customers of the business. Other current assets may appear in the balance sheet, but these groups are the more important ones to be found in the audit of an industrial or mercantile concern.

The verification of receivables and cash necessitates, first, a consideration of the size and type of the business organization and, second, a study of the system of accounting employed. The method of internal audit will, to a large measure, determine the extent to which an auditor may dispense with a detailed verification and may rely on general tests to satisfy himself as to the accuracy of the accounts. This is emphasized, particularly with reference to accounts receivable, by the Federal Reserve Board, as follows:

> "In large concerns the system of accounting is generally so arranged that it would be almost impossible for accounts to be paid and not correctly credited on the accounts-receivable ledgers, but in small concerns, with imperfect systems, such occurrences are quite possible, so much so, in fact, that it is generally admitted that the risk of errors and omissions decreases in direct proportion to an increase in bookkeeping."**

The auditor should not, therefore, begin the verification of these current assets until he has given due consideration to the general organization and especially to the accounting methods of the business under audit.

* See *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 7–10.
** *Ibid*, page 10.

Accounts Receivable—General Procedure

As in the case of inventories, the auditor should satisfy himself as to the clerical accuracy of the accounts and should take every precaution to guard against their manipulation by unscrupulous persons. He should obtain the trial balances of the customers' ledgers, if such have been prepared, and should check the balances to the ledgers and verify the footings of the trial balances. Open balances should be scrutinized for items of long standing, for while a customer may be making regular payments on current transactions old items under dispute may have been carried forward for considerable periods of time.

Schedules should be prepared summarizing the accounts receivable, showing total debits, total credits and net balances, or the net balances only (see Schedule *E-1*, APPENDIX A), the sum of the net balances agreeing with the controlling account in the general or private ledger. When checking the subsidiary trial balances, the auditor should mark the accounts of all officers and employees and should obtain a separate total for them. If he is not sure about employees he should inquire of the sales ledgers bookkeepers. Quite often, particularly in large concerns, separate ledgers will be kept for employees and officers.

Likewise, consignment accounts should be totaled separately and a memorandum outlining the company's method of handling consignments should be prepared for the auditor in charge. Such data in all probability can be obtained only from one of the officers. Any large credit balances should also be listed on a separate schedule showing the names and amounts and giving full explanations as to why they exist. The credit balances should be transferred to the Accounts Payable summary (see Schedule *E*, APPENDIX A) and be included as a current liability in the balance sheet.

Oftentimes in practice other items which do not really belong in the accounts receivable are included therein in the balance sheet because they are relatively small. These include accrued interest receivable (see Schedule *E*, APPENDIX A), uncollected matured coupons, officers' and employees' balances and similar items. Sub-schedules should be prepared for these relatively small amounts, which should be agreed with the amounts making up the total accounts receivable appearing in the balance sheet. Loans to employees should be approved by an officer of the com-

pany, while loans to officers should be authorized in the minutes of the board of directors. In either case the auditor should ascertain the probable date of payment of the accounts.

A classified summary of all accounts receivable should be prepared, *usually in comparative form*, somewhat as follows:

(*a*) Trade debtors
(*b*) Advances to officers and employees
(*c*) Due from employees on stock subscriptions, etc.
(*d*) Consignment accounts
(*e*) Accrued interest, etc., receivable
(*f*) Payments made in advance on account of contracts for merchandise
(*g*) Other accounts receivable

Largely on the basis of this summary the assistant in charge will determine whether or not any of the items are of sufficient importance or amount to be shown separately in the balance sheet. With reference to advances to officers and employees, it has been held that failure by an auditor to show this item in the balance sheet when it is of comparative importance is sufficient evidence to justify disciplinary action by the proper authorities.

If amounts are due from employees on various stock or bond subscriptions, the securities should be counted or the subscription lists inspected, and reasonable tests should be made of receipts from employees and of total amounts paid and balances due. Whenever round figures are found in customers' accounts (for instance, a charge of $1,000) the amounts should be scrutinized carefully, and explanations should be obtained for a sufficient number of such items to satisfy the auditor of the correctness or incorrectness of them. Likewise all credits to accounts receivable from sources other than the cash book should be investigated, and the auditor should be entirely satisfied that the accounts are in order.

Returns and allowances should be carefully analyzed, and the company's policy with reference thereto should be fully ascertained. A schedule may be prepared showing (*a*) the date, (*b*) folio and ledger number, (*c*) to whom the allowance was made and for what, and (*d*) the amount. Allowances having no special significance and small in amount should be grouped in monthly or other totals. The analysis should cover both the debit and credit amounts, and the schedule should be agreed with the ledger ac-

counts. Returns and allowances recorded in the period following the close of the year under audit should be scanned to ascertain if any of them belong to the earlier period. In some cases sales have been put through at the end of one year and reversed at the commencement of the next, thereby inflating the profits of the prior period.

Substantial tests should usually be made of the shipping records to see that goods charged as sales to customers were actually shipped and also to satisfy the auditor that shipments made were charged to customers' accounts. The character and extent of such test should be determined by the accountant in charge of the audit.

Branches and Subsidiary Companies

In the verification of the customers' accounts receivable of branches or sales offices it is necessary to agree them with the home-office ledger. Whether or not the auditor will make an actual examination of the accounts of some or all of the branch or sales offices will depend largely upon the system of accounting in effect and upon other circumstances of the individual case. For the purpose of the audit a summary schedule, somewhat as follows, may be used:

Summary of Accounts Receivable of Branches
December 31, 1922

Branch office	Total per Trial Balance Sheets						Balance (net) per branch	Balance (net) per home office	Over or under (red)
	Debits			Credits					
	Current	Past due	Employees	Current	Employees	Accts. payable			
	$	$	$	$	$	$	$	$	$

This schedule may then be supported by such detail as the person in charge of the audit considers necessary. All footings of the trial balance sheets should be proved and the totals should be checked to the above summary schedule.

The amounts owed by affiliated (subsidiary) corporations or the accounts with such affiliated companies should not be included as customers' accounts even though arising as a result of trading transactions. If the total of such amounts is comparatively small it is sometimes in practice combined with the accounts receivable, but this cannot be said to be the best procedure. Customers' accounts receivable and amounts owed by affiliated companies should be shown separately in the balance sheet.

Confirming the Accounts Receivable

It may be said that "the best verification of an open balance is a confirmation by the customer."* Although ordinarily customers will not be circularized, as a practical thing the auditor should discuss with the client the advisability of sending out statements to customers and thus have a definite understanding at the beginning of the audit as to what the procedure shall be. In this way the auditor protects himself from possible severe criticism should it later appear that anything was wrong with the accounts receivable.

If it is decided to send out circulars the auditor must keep the customers' statements absolutely under his control after they have been compared with the sales ledgers and must himself see them mailed. Otherwise the circularization is worthless. The greatest weakness in sending out statements to customers is that the defaulter, if such there be, usually tampers with accounts such as those with government agencies, etc., which probably will not reply to the request of the auditor.

Statement of Work Done

A full statement of work done with reference to the verification of accounts receivable and of the reserve for bad debts should be prepared and included in the working papers. What this statement will consist of will depend almost wholly upon the method of billing and entering sales to the customers' accounts, and will depend as well, upon recording payments or other credits on account. The following, taken from the working papers for an industrial concern which sells both at wholesale and at retail, will give the reader an idea of the work done on this audit and also of what such a statement should contain (see also Schedule *E-1*,

* See *Approved Methods for the Preparation of Balance Sheet Statements*, p. 10.

Appendix A):

Wholesale Accounts

Checked the subsidiary ledgers to the trial balances and footed all trial balances.
Listed all accounts which were 60 days or more past due as of December 31, 1921, and were still unpaid, showing the credit limit. Such accounts were discussed with the treasurer and approved by him.
Listed all accounts greatly in excess of the credit limits. The credit limit stated in the ledger accounts does not, in most cases, limit the customer to that amount. If the customer pays his bills promptly and in accordance with invoice terms, the credit limit is practically disregarded.
Listed all accounts of $5,000.00 and over.
Prepared a summary of all the sales ledgers.

Retail Accounts

Checked all large balances from the ledgers to the trial balances.
Footed all trial balances.
Listed all large balances which were 60 days or more past due at December 31, 1921, and were still unpaid. All past-due accounts were taken up with treasurer and approved by him.
Checked all balances from the C. O. D. ledger to the trial balance.
Ascertained that all debts written off had been properly authorized by responsible officers.
Ascertained that no accounts had been assigned or hypothecated and obtained certificate to that effect.
Sufficiency of reserve for bad debts investigated, as was also company's policy with reference to cash discounts, allowances to customers, etc.
Discussed with client the feasibility of confirming the customers' accounts, and it was decided not to send statements to customers.
Tests were made of the shipping records for the last week of the period to ascertain if goods charged to customers as sales were really shipped; also to ascertain if shipments made were regularly charged to customers' accounts.

Reserve for Bad Debts

The sufficiency of the provision or reserve for bad debts is of primary importance and yet something impossible of exact determination. One of the best methods of approaching the problem is to ask the credit department for the "bad debts" correspondence file and ascertain from that what accounts are questionable or entirely bad. The auditor will probably be informed that nothing of the kind exists, but a little tact and perseverance will usually unearth such a file. Notations in individual accounts in the subsidiary ledgers should also be carefully observed, and satisfactory explanations should be obtained for all questionable amounts or entries. Debts admitted to be "bad" should be actually written off the books.

The amount of reserve needed will vary in different industries and also in different concerns within an industry. Attempts

have been made by trustworthy agencies to gather such statistics, but with somewhat varying results. As it is conservative to set aside a safe provision to cover losses from inability to collect customers' accounts, the amount reserved for bad debts should ordinarily be somewhat in excess of the actual amounts written off during a corresponding period. Too large a reserve should not be built up, however, because it gives a wrong impression of the real condition with reference to accounts receivable. Inasmuch as the bad debts loss does vary in different types of business, the auditor must consider carefully the customs and practices of the client's business in order to determine the amount which should be a fair provision for uncollectible accounts.

The accounts receivable which are past due, for which a schedule should have been prepared when the trial balances were checked to the subsidiary ledgers, should be discussed with an officer of the company. The auditor should satisfy himself that the bad debts written off have been properly authorized by responsible officers, and the smaller the accounting force the more important this is. The doubtful items, when taken up with the proper officer, should be marked "good", "doubtful", "bad", "suspense", "claim", etc. (see Schedule *E-1*, Appendix A). The form of schedule that is used obviously matters little; the important thing is that the accounts shall be in order and that the auditor shall be satisfied that the provision for bad debts is sufficient to warrant an unqualified certificate.

Notes Receivable — General Procedure

As in the case of accounts receivable, a general survey of the business and organization of the client will often give helpful information concerning the value of notes receivable. In some kinds of business, the silk and jewelry trades for example, notes receivable are given by customers of the very highest standing, while in some other trades notes are usually considered unfavorably.

The auditor should obtain the company's list of notes as of the last day of the period under audit or should prepare his own schedule containing information similar to that in Schedule *F*, Appendix A. All notes on hand on the day when the verification is made, as well as the list of notes for the last day of the fiscal period, should be inspected (see note, p. 10). One assistant or-

dinarily should examine the notes and should call off the data to another assistant who will enter them on the schedule. The net total of all notes must be agreed with the general ledger trial balance.

Notes past due or continuous renewals should be noted in the working papers and discussed with someone qualified to pass judgment upon them. A list of notes discounted and not yet due should be prepared, the cash should be traced into the cash book, and confirmations of the notes should be obtained from the banks or other holders. If securities or other collateral is held on account of the notes it should be seen, for sometimes the value of the notes is no more than the value of the collateral. All notes should be seen or full explanation should be given as to why they were not seen — thus, if paid at the date of the examination, the working papers should record that as a reason for not seeing them (see Schedule *F*, Appendix A); the cash collections should be traced into the cash book, and the auditor should satisfy himself by examination of the cash disbursements that the entries were not merely journal transfers. The location of notes receivable said to be in the possession of banks or of collection agencies or filed in bankruptcy proceedings, etc., should be ascertained and letters should be sent by the client requesting that the auditor be notified directly in regard to the possession of the notes.

Notes receivable signed by subsidiary companies or customers' notes held at sales agencies should receive the same verification as regular notes receivable of the main business. All notes should be seen or verified by correspondence with depositories or collecting agents.

If notes receivable have been protested for non-payment every protested note should be submitted as a voucher, or there should be some accounting for it. Protest fees, accrued interest, etc., as well as the face of the note, should be charged back to the debtor's account (except perhaps in the case of agricultural loans for the purchase of machinery, etc., when the non-payment results from crop failure and the notes are in fact reasonably certain to be paid).

The auditor should ascertain, in case the amount stated in the face of a note does not agree with the amount appearing in the company list, whether or not the difference is endorsed on the back of the note as a collection on account. Conversely, the backs of all

notes should be examined to see whether or not endorsements for payment on account have been entered in the books. It is important to find out who has the authority to endorse notes on the back for payments made on account, and this information should be included in the working papers. If such notations may be made by the cashier the opportunities for irregularity are obvious.

The rate of interest should be recorded in the working schedule and reference should be made to the notes receivable register to ascertain the date to which interest has been paid. While it is quite common not to accrue interest on notes receivable, but merely to take it up in the accounts as and when received, if the interest has been calculated and will be due from solvent debtors who have not defaulted on previous instalments the amount may be included in the schedule (see Schedule *F*, Appendix A). The total of such accrued interest receivable, as already mentioned, will usually be shown as an item in the accounts receivable summary.

Cash — General Procedure

The verification of the cash and petty cash fund balances is one of the first tasks assigned the junior assistant and the procedure should be thoroughly mastered.* The procedure to be followed may be very briefly outlined as follows:

Upon the auditor's arrival at the client's office he should immediately assign an assistant to make the cash count.** The cash and other cash items should be recorded somewhat as illustrated on Schedule *H-3*, Appendix A, and when the volume of transactions recorded between the close of the fiscal year and the date of the count is comparatively small the transactions should be verified. If the cash drawer fund is kept at a constant figure the assistant should see that a refunding cheque for all expenditures to the end of the fiscal year is shown as received within the period. If this is not done a note should be made on the schedule showing the date on which the cheque was received.

The assistant should then fill in one bank certificate form for each bank at which the client carries an account (see Exhibit *13*, Appendix B), have them signed by the proper officer, enclose with each one the auditor's stamped return envelope and mail the certificates himself.

He should then obtain from the office manager or cashier the

* See also Reynolds and Thornton, *Duties of the Junior Accountant*, pp. 17–33.
** This is on the assumption that the cash count has not already been made. See note, page 10.

canceled cheques which were returned by the banks as of the close of business on the last day of the fiscal period and any cheques returned as of later dates. He should also ask for the company's reconciliation statement as of November 30th and the bank statements for December 31st (assuming a calendar-year closing), or the balanced pass books and the cheque or bank register. The canceled cheques should be checked to the bank register for December and any November cheques included with the December returned cheques should be traced to the company's November bank reconciliation. All unchecked items in the bank register and in the November reconciliation should be traced into the company's reconciliation statement as of the close of the fiscal year (December 31st), and all items should check. The assistant should then prepare schedules similar to Schedules *H-1* and *H-2*, Appendix A, each bank account being reconciled separately. If more than one month's transactions are verified the examination will be that much more extensive.

Ordinarily, the deposits for the closing two weeks should be checked to the bank statements, and if any deposits appear in the bank register which do not appear in the bank statement, an adjusting entry should be made as shown on Schedule *H-2*, Appendix A. All such unentered deposits should be traced to the bank statement for the first month of the new year. The deposits as shown by the current bank account should be checked with the duplicate deposit slips in the company's office for at least one week at the end of the year, and the duplicate deposits for each day of this period should be agreed in detail with the receipts as shown by the cash book, in order to detect any withholding of cash during the period under investigation.

All canceled cheques returned by the bank for the first month of the new year should be examined, and the outstanding cheques appearing in the auditor's copy of the reconciliation for the close of the year should be checked against the cheques then returned by the bank. Wherever possible the date on which the cheque was paid by the bank should be ascertained, and the auditor should be sure that the date of payment is subsequent to the last day of the fiscal period. When an audit is in progress at the end of the first month following the close of the period under audit it is a good plan to request that the bank statements for that month be handed unopened to the auditor's representative. The

auditor by this method can more readily check the outstanding cheques, which otherwise might be filed away.

When the client has branches or controls subsidiary companies the assistant must take particular care to indicate on his copy of the reconciliation statement any outstanding cheques payable to branches or subsidiary companies. Also, any deposits said to be in transit between the home office and branches should be indicated.

When checking deposits to a bank statement an interest credit may appear in the bank statement which is not shown in the bank register until the first month of the following period. This will form an additional item in the reconciliation statement (see Schedule *H-1*, Appendix A). Credits may also be found in the bank statement for collections made on notes, or there may be debits for exchange charges, etc., not taken up in the books of the company. These items should be taken up and the company should be requested to make the adjustments in its books as of the close of the period under audit.

When the certificates are returned by the banks they should be attached to the respective reconciliation statements and the balances shown thereon should be agreed with the balances given by the company as "balance as per bank" (see Schedules *H-1a* and *H-2a*, Appendix A). The final balances appearing in the respective reconciliation statements should then be combined as a summary of all balances and should be agreed with the general ledger trial balance figure for cash in banks and on hand (see Schedule *H*, Appendix A).

The Cash Schedules

The verification of cash may call for three different kinds of schedules, although probably not more than two of these would be used in any one cash verification. Schedules *H-1*, *H-1a*, *H-2* and *H-2a*, Appendix A, will be used for the verification of the bank balances where all receipts are deposited in the bank and all withdrawals are made by cheque. If several such bank accounts are kept, as many reconciliations must be prepared as there are bank accounts to reconcile, and the sum of the cash balances as shown by all reconciliations must be agreed with the general cash book balance.

Schedule *H-3* will be used for the cash count — petty and other

working funds — and for reconciling these balances with the petty cash records. The assistant should be familiar with the several methods in use for recording petty cash, although it is probable that the Imprest System will be the method most frequently found — it is undoubtedly the method to be recommended.

Lastly, in case the reconciliation is some time after the close of the audit period or if the cash drawer and bank funds are not kept separately, the assistant must make a complete reconciliation of the bank and cash drawer funds as of the date of the actual count and should, in addition, obtain a statement from the bank as of the close of the period under audit. If the total cash balance, including the bank balances, is found to have been correct as of the close of the period, he may deduct the balance in bank as of the close of the audit period from the total cash balance at that date to determine the funds in the cash drawer. It may be necessary, of course, to alter slightly the form of schedules used, but ordinarily one may follow the methods of verification shown.

Summaries, Statement of Work Done, Etc.

In addition to the schedules shown and discussed, it may be desirable to summarize the cash receipts and disbursements of a client for the entire period under audit. This requires attention to the cash balances at the beginning of the period, as well as to those at the close of the period. Such a summary gives a very good bird's-eye view of the cash activities of the year, and may be prepared as follows:

Balance, January 1, 1922		....
Receipts (detailed by classes):		
A	....	
B	....	
C	....	
Etc.	....	
		....
Together		....
Disbursements (detailed):		
X	....	
Y	....	
Z	....	
Etc.	....	
		....
Balance, December 31, 1922 per cash reconciliation		....

When the actual count and verification of cash are made at

some date later than the close of the fiscal period, a summary may be prepared as follows:

Balance, per cash book at the later date		....
Add — Disbursements for the intervening period		....
	Together	....
Deduct — Receipts for the intervening period		....
Balance, per cash book at the close of the period (to be reconciled)		....

This summary in the case in which it was used did not include cash drawer funds but only amounts entered in the cash book all of which were deposited in the bank.

General

In the verification of the cash of a steamship company, in addition to all the regular cash schedules the following was prepared to show exactly what work was done and the assistants' initials were written in the columns to show who did the work:

Cash Verification, December 31, 1921

Month of*	Bank**	Receipts checked into banks	Receipt column in cash book added	Canceled cheques checked into cash book	Disbursement columns in cash book added	Vouchers examined

* Four months out of two years examined.
** Seven banks verified for each of the four months.

In the counting of funds, etc., the working papers should state the exact time when the funds were counted, who counted and reconciled them, who is in charge of each fund, who may authorize or approve petty cash vouchers, etc. In some cases it will be found that the petty cash vouchers are receipted but not approved, while occasionally approvals will have been made but the signatures for the receipt of the cash will be lacking. Where such a condition is found, it should be noted in the working papers and the assistant should call the matter to the attention of the person in charge of the audit. The work done in verifying the general bank accounts should also be fully recorded in the working papers (see Schedules *H-4* and *H-5*, Appendix A).

Perhaps it is not amiss to emphasize once more that *notes receivable and, ordinarily, securities should be examined in conjunction*

with the cash count. Such procedure safeguards against transferring funds to cover up shortages. Also, the assistant *must never permit himself to be left alone with either cash or securities;* some member of the client's staff should be present throughout the count.

The reader may refer at all times to the working papers shown in APPENDIX A for concrete illustrations of the more important points referred to in the above discussion. If these principles are mastered, ordinary intelligence will enable an assistant to verify satisfactorily the cash drawer funds and the bank accounts.

CHAPTER VIII

Scheduling Deferred Charges to Operations

Nature of Deferred Charges

It may be said, when considering the matter most broadly, that all investment in plant and equipment is a deferred charge to future operations. But this is not the thought which enters the mind of the accountant or of the average business man when he reads in the annual balance sheet of some concern the words "Deferred charges to future operations."

Deferred charges* include various expenses paid in advance; the periods for which they are paid do not coincide with the fiscal period of the business. The unexpired portion of such expenses is inserted in the balance sheet as an asset, and is applied (if not shown) in the profit and loss account in reduction of the fiscal period's expenses, the prepaid portion at the beginning of the period being added to the expenses. What is actually done in practice, ordinarily, is that each month the proportion of such expenses applicable to the period is transferred to the operating accounts.

The most common of such items, perhaps, is prepaid or unexpired insurance. Others are prepaid taxes, rentals, royalties, interest, advertising and office supplies (such as printed letterheads, etc., which would have practically no value in case of sale or liquidation). Discount on bonds and organization expenses are also often included, though it is preferable, if these two items are substantial in amount, that they be shown separately in the balance sheet.

Unexpired Insurance

Documentary proof should be provided to support the amount of unexpired insurance as recorded in the working papers and as included in the balance sheet. It is sometimes possible to get a statement of the amount of insurance carried and of the

* See *Approved Methods for the Preparation of Balance Sheet Statements*, p. 16.

premiums unexpired from the insurance agency (see Schedule *J-1a*, Appendix A). If not, the auditor should call for the insurance register or similar record which will ordinarily be kept. He should obtain the actual policies for examination, and either prepare a schedule or check the one already prepared by the company, showing the date of each policy, the name of the company with which the policy is held, the class of insurance (fire, liability, etc.), the term of the policy, the property covered thereby, the amount of the insurance (face of policies), the premium paid and the unexpired portion of the premium carried forward. The reader should study Exhibit *14*, Appendix B, and the directions given therewith. If the fire insurance is with mutual companies a certificate should be obtained from the insurance companies showing the estimated amount returnable at the close of the year. This estimate may perhaps be based upon the experience of past years, particularly if the dividend payable has been approximately the same from year to year. The latter method has been followed regularly in the case of several large and prominent industrials.

Such an examination of the insurance policies is valuable not so much because of the financial amount involved (which is ordinarily comparatively small), but more because the examination will reveal mortgaged properties, or property otherwise covered by lien, and will also show what assets are insured, so that omissions may be called to the attention of the client. The amount of insurance carried is also frequently a matter of very close scrutiny by banks in extending credit, and it should always be considered by the auditor. Furthermore the amount of insurance carried on such items as buildings, equipment and inventories may give valuable information as to what the client really thinks they are worth and it may lead to inquiry as to possible over- or undervaluation of them.

The possible liability for additional premiums payable for compensation or liability insurance should be investigated. This may be ascertained by multiplying the total actual payroll from the date of the policy to the close of the period under audit by the rates named in the policy. Any excess of the total so obtained over the amounts already paid as premiums on the policies will measure the amount of additional premium to be paid and to be set up as a liability. If the amount is of comparative importance

it should be included with the accounts payable in the balance sheet.

Unexpired insurance will be found to include a variety of forms of insurance. Thus, in the case of a single industrial, the following kinds of policies were found:

(*a*) Mutual fire insurance
(*b*) Standard fire insurance
(*c*) Burglary Insurance
(*d*) Hold-up Insurance
(*e*) Stock companies insurance
(*f*) Boiler insurance
(*g*) Sprinkler insurance
(*h*) Tornado insurance
(*i*) Elevator insurance
(*j*) Liability and compensation insurance
(*k*) A number of miscellaneous individual policies

All policies were examined, and the dividend of December 31, 1921, in respect to the mutual fire insurance policies was estimated at 88% of the premium paid, based upon the experience of previous years with the same insurance company.

Other forms of schedules may be necessary in some cases where varying conditions do not permit of the satisfactory use of the schedules illustrated in Appendices A and B. It cannot be said, usually, that one schedule is correct and another incorrect — what is necessary is that certain fundamental information be obtained, and the schedules on which these data are recorded are good or bad depending upon whether or not they clearly set forth what is wanted.

Prepaid Interest

To verify interest prepaid the auditor should obtain the list of notes on which such interest is prepaid—showing the dates of the notes, the payees, the terms of the notes, the maturity dates and rates of interest, the total discount or prepaid interest, and the portion of such interest to be carried forward as a deferred charge to future operations. It is preferable that this schedule be prepared by the client, usually by adding extra columns to the notes payable schedule, and the auditor should then thoroughly check or test the prepayments of interest as shown by the client's

schedule, cross-indexing the total prepayment to the deferred charges schedule.

Prepaid Taxes

In the case of taxes prepaid and chargeable to future operations, the amount of taxes paid and the period for which paid should be ascertained and the amount should be included with other prepaid items in the balance sheet. Quite often the greatest difficulty in the case of taxes is to determine the period covered, and special attention should be given this part of the verification. Little difficulty will be experienced in determining the period covered by the capital stock tax. Taxes prepaid and accrued should not be offset — the former is a deferred charge whereas the latter is an accrued liability which affects the current position.

Miscellaneous Deferred Charges

In case of additional small and miscellaneous items of deferred expense, a schedule somewhat as follows may be prepared:

MISCELLANEOUS DEFERRED EXPENSES, DECEMBER 31, 1922

Date incurred	For what	Amount of original charge	Amount written off	Balance (date of audit)	Explanation of how written off, or why carried as Deferred Expense
		$	$	$	

The above form was used in the audit of a newspaper, and the balance carried forward as of the date of the audit amounted to many thousands of dollars. It included advances to correspondents for trips to various parts of the world, particularly to Russia, dues to various press clubs, newspaper associations, etc., prepaid special issue expenses, freight and cartage on unused paper, permanent alteration expenses and numerous other items of expense.

The verification of such expenses calls for an examination of vouchers for proper authorizations and approvals, of receiving records for goods or supplies purchased, or of receipts for cash advanced, etc. Many times the reason for deferring such expenses to future operations must be sought from some one in

authority in the business. Written statements in such instances, particularly when the items are substantial in size, may be obtained from an officer or from the manager of the business. These statements should certify that the amounts are proper charges against future operations. However, sound judgment on his own part will prove the auditor's main protection with reference to such amounts.

Prepaid Advertising and Selling Expense

The expenses of conducting an extensive advertising campaign may for a time reach a large figure, the aim being to bring an article prominently before the public. After this is accomplished it may not be necessary to do more than a moderate amount of advertising to hold the patronage gained. Some time will elapse before the full benefit of such a campaign will be reflected in the sales, and in the meantime these extraordinary expenses may be distributed over several fiscal periods instead of being charged off entirely in the period in which they are incurred. Advertising contracts should be seen; space in various magazines, trade journals, or daily newspapers should be thoroughly tested by actual examination of sufficient copies thereof to satisfy the auditor that the space was actually utilized, and a statement should be obtained from an officer or from the advertising manager regarding the policy of the company in deferring the expense. In one important case this item was accepted by the auditor only when a resolution was spread in the minute book of the board of directors of the corporation, outlining the policy with regard to the advertising campaign and stating definitely what expenditures it was proposed to make in the near future — in order to equalize the total charges as between the several periods. Advertising appropriations should be tested thoroughly and should be compared with the actual expenditures on account thereof. If appropriations have been overrun the assistant doing the work should bring the matter to the attention of the person in charge of the audit.

Similarly, in case of a seasonal business heavy expenses may be incurred, for instance, in one season for salaries and traveling expenses for securing orders for the following season. Such expenses may sometimes be carried forward to be charged off in the period during which the goods are delivered, though these expenses will

ordinarily be nearly uniform from period to period and will therefore not need to be carried forward.

Such deferred items as advertising and selling expenses, if allowed at all, should be clearly stated in the balance sheet, so that it may be understood that they have no tangible or realizable value, although listed among the assets in the financial statement of condition. *Deferring such items should be done for sound reasons only and in each case the facts should be obtained by the assistant and be brought up for special consideration.*

Discount on Bonds

It is commonly stated that discount on bonds should be written off over the life of the bonds. However, merely dividing the amount of the discount by the total years the bonds may run would sometimes give inaccurate results, for bond issues do not usually remain outstanding in their entirety during the whole period for which they are issued.* Bond discount may be most correctly charged off on the basis of true interest paid, though approximately the same results may be obtained more easily by making the computation on the basis of the par value of the bonds outstanding during each year.

The auditor should understand the method of finding the effective interest rate, for only by understanding how the discount should be charged annually into operations can he determine what amount of discount may properly be deferred to future periods and be so shown in the balance sheet.** The method employed by a client in writing off such discount should be studied somewhat carefully and should be explained briefly in the working papers. If the method used does not provide for writing off the bond discount approximately in accordance with the true effective interest rate, it should be reported to the assistant in charge of the audit and the matter should be taken up with the client.

Organization Expenses

Organization expenses should ordinarily be stated separately in the balance sheet. The attitude toward the item varies from that of Continental Europe, where, at least before the Great War, several nations required by statute that the amount be carried as a permanent asset, to that in the United States, where many

* See Journal of Accountancy, September, 1913, pp. 169–74.
** See Dickinson, A. Lowes, *Accounting Practice and Procedure*, pp. 134–42.

auditors urge that the amount be written off to operations at once or deferred over the next two or three years from the time when the expenses were incurred.

A complete analysis of all changes in this account from the time of the last audit should be prepared, or, in case of a first audit, from the inception of the account. For the debits the schedules should show the date and folio of each item, an explanation of the charge and the amount. All adjusting credits should be noted, and special attention should be given to the proportion of the expense to be written off during the current period.

Conclusion

It may be that items other than those discussed in this chapter will be found in various audits and will be carried in the balance sheets as deferred charges to future operations. Deferred charges, in many cases at least, have no tangible or realizable value and must accordingly be considered entirely from the standpoint of a going concern. In practice, moreover, clients will often be found who do not wish to defer prepaid items even when the amounts are quite large. If the policy in this respect is consistent from year to year the auditor cannot object to it; the assistant on the audit, however, should bring the matter to the attention of his principal.

The duty of the auditor, then, when deferred charges are shown in the statements of financial condition, is to determine (*a*) whether or not the charges made to such accounts during the period under audit, or possibly from the inception of the accounts, were valid and proper charges, and (*b*), if so, the proportion of those charges which may properly be carried forward to the operations of future periods. This involves not only the arithmetical accuracy of the amounts carried forward, but also the propriety of the charges.

CHAPTER IX

Capital Stock and Funded Indebtedness*

Capital Stock

In the verification of capital stock, particularly in case of a first audit, the auditor should see a copy of the charter or certificate of incorporation, the corporation by-laws and the minutes of the stockholders and board of directors for data concerning the capital stock authorized, the method of paying subscriptions and of issuing stock, the kinds and par value of stock issued and similar information. Letters should be obtained from the transfer agents certifying to the capital stock outstanding, or, if there is no transfer agent, the stock ledgers and certificate books should be examined to guard against over-issue of stock. In case the auditor inspects the stock certificate books he should see that the proper transfer tax stamps are attached to all stock stubs. Under the provisions of the Revenue Act of 1921 these stamps "shall be attached to the certificate books and not to the certificates issued." The proceeds from the sale of the stock should be accounted for, whether cash or property, so far as it is possible for the auditor to do so. If a first audit, the capital stock account, like the property and surplus accounts, should be completely analyzed from the beginning of the business or for a reasonable period of time. The auditor should determine how the capital stock was set up in the books in the beginning—that is, whether or not property or cash, etc., was received for it—and he should record in his working papers all important changes in the account from that date.

Trust companies usually act as transfer agents for the capital stock of corporations, and, when this is so, letters from them certifying to the capital stock outstanding is sufficient verification (see Schedule *AA-1*, Appendix A). These letters should always be obtained, showing separately the number of shares of each kind of capital stock (whether having par value or no par value) outstanding. When the stock is issued by the company itself the auditor should compare the stock registers and stock certificate books with

* See *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 20–1.

the lists of outstanding stockholders. The total capital stock outstanding according to the general ledger should be agreed with the final balances as above. In examining the certificate books the auditor should observe whether or not all canceled certificates are pasted back into the certificate book and are marked "*canceled.*" The canceled stock certificates are usually not pasted back into the certificate book in the case of those larger companies having active stocks; these larger companies, however, ordinarily have transfer agents and registrars and the auditor has little reason for seeing the stock certificate books.

A schedule should be prepared in case changes have taken place during the year in the capital stock, showing (*a*) the shares and book value of the stock outstanding at the beginning of the period, (*b*) the additional issuance (including the date of issue, the number of shares issued, the par value of the shares issued, and the amount and kind of property received), (*c*) the shares redeemed or canceled during the year, and (*d*) the capital stock outstanding as of the close of the period under audit. The auditor should verify the proceeds of the sale of additional stock, tracing the cash into the cash book and bank, or satisfying himself that the physical property has actually been transferred to and received by the corporation (see Schedule *AA*, Appendix A).

In case it is necessary to examine the stock registers and the stock certificate books, separate schedules of the common stockholders and of the preferred stockholders should be prepared, somewhat as follows:—

XYZ Company 7% Cum. Preferred Stock — C.S. $500,000.00 — Par $100.00

In name of	Certificate No.	Number of shares	Remarks

Under "Remarks" it should be stated whether or not the certificates have been receipted for, etc. It is desirable to list *all* certificates, showing those which have been canceled (in the first two

columns only) as well as those outstanding. The total of the "number of shares" column must account for all outstanding certificates and for the total capital as reflected in the balance sheet.

In case capital stock has been sold on the instalment plan the auditor should ascertain whether all instalments have been met promptly as due or some are in arrears. Inspection should be made of the minutes of the board of directors for approval in case of a special concession made to any stockholder. A schedule of such instalment sales may be prepared somewhat as follows:—

XYZ COMPANY—INSTALMENT SALES—COMMON STOCK

Sold to	No. of shares common	No. of instalments	Total par value	Premium or discount (red)
Silas Marner....................	200	5	$20,000	None
Totals....................	10,000		$1,000,000	None

DECEMBER 31, 1922

Amount each instalment	Instalments		Total amount unpaid	Instalments paid in full and stock issued	Remarks
	Paid 12/31/22	Unpaid 12/31/22			
$4,000	3	2	$8,000	4/5/1923	
$200,000					

As stated previously, the cash should be traced into the cash book and bank, or in case other property is received in payment for the stock it should be accounted for by ascertaining that it was transferred to and received by the client. The total amount of unpaid instalments should be verified by checking against the subscription lists.

As stated in the Federal Reserve Bulletin,* when there is more than one class of stock outstanding the balance sheet should show each separately, giving the amount authorized, issued and in the treasury. In case dividends have been passed on cumulative preferred stock a note should be placed in the balance sheet, preferably just below the item of Preferred Capital Stock, referring to the dividends which may have accrued but have not been declared.

* See page 21.

Separate schedules should always be prepared for each class of stock, in accordance with the procedure outlined above and as set forth in the reference at the beginning of the chapter.

Treasury Stock

Unless the state law under which a corporation is chartered or a provision in the charter of the corporation itself prohibits the corporation from purchasing or owning its own stock (other than for purposes of retiring the stock in accordance with a sinking-fund agreement), there is no rule, at least in the case of stocks listed on the New York Stock Exchange, which prohibits a company from buying and selling its own stock. However, a company whose stock is listed on the New York Stock Exchange would not be permitted to corner its own stock, and all companies must leave a reasonable floating supply of their stock available for purchase. The acquisition of stock by many large and progressive companies for resale to their employees at terms more favorable than those on which the employees could purchase the stock in the open market is becoming quite common, and treasury stock may be found in the audit of many companies, except as specifically prohibited by statute or by charter.

In verifying treasury stock the auditor should begin with the balance as per the general ledger trial balance at the beginning of the period under audit. The certificates of stock on hand at the close of the year should be verified by an inspection of the certificates of stock on hand and in the treasury. The sales and purchases of the period should be supported by brokers' advices and by cash-book entries.

The accounting rule with reference to treasury stock is clearly stated by Sir Arthur Lowes Dickinson: "All stock in possession of the corporation which issues it should be deducted from the liability shown on the balance sheet so as to truly set forth the number of shares in the undertaking which *have really been issued to and remain in the hands of the public at the date of the balance sheet.*"* If the amount of treasury stock is relatively insignificant and is held as a temporary investment only, it may be permissible to include the amount with the current or marketable investments and the same rules would govern its valuation in the balance sheet. Strictly speaking, however, treasury stock is never an asset—at most it is

* See *Accounting Practice and Procedure,* p. 132.

only a resource, and the practice of showing such an item as an asset should be adopted only in rare instances.

Capital Stock of No Par Value

With the rapid increase in the number of corporations issuing capital stock of no par value, capital surplus has come to have a much more significant place in the balance sheets of industrial corporations. The method which is perhaps most largely employed is to show as the value of the capital stock of no par value the excess of capital and surplus, or of capital alone, when the shares were originally issued. This is illustrated in many published balance sheets, typical of which are the following:

Common stock — 206,834 shares of no par value outstanding in hands of public	$16,732,240.00

This is taken from the published consolidated balance sheet as of December 31, 1921, of the Famous Players-Lasky Corporation. Another example, somewhat similar to that given, is the Fisher Body Corporation which in its published consolidated balance sheet as of April 30, 1922 merely states its common capital stock, viz.:

Capital, represented by 500,000 shares of common stock of no par value	$29,711,324.98

As an example of a company which shows separately the capital and capital surplus items, the balance sheet of the Pierce-Arrow Motor Car Company as of December 31, 1920, is perhaps representative. In this balance sheet the common stock and capital surplus were shown at the top of the liability side of the balance sheet, as follows:—

Common Stock:		
Authorized and issued—		
250,000 shares of no par value but of the declared value of $5.00 per share	$1,250,000.00	
Capital Surplus	4,081,411.90	$5,331,411.90

The earned surplus of the company was shown as a separate item at the bottom of the balance sheet.

Where statute law requires a minimum declared value it would seem that a desirable way to state the item in the balance sheet would be (above figures used for the illustration):

Common Stock:	
Authorized and issued —	
250,000 shares of no par value (but of the declared value of $5.00 per share)	$5,331,411.90

The verification, schedules, and the certificates to be obtained would be similar to those for stock with par value.

Capital Surplus

Full explanation of the capital surplus item, in case of a first audit, should be given in the working papers. This explanation should show how the amount was set up in the books in the first place (see Chapter XII) and should detail all changes in the accounts from that date. Increases in the account through appreciation surplus arising through appraisal (when placed upon the books), etc., should be explained and thoroughly analyzed by the assistant on the audit. Any profit on the sale of capital assets would probably be applied as capital surplus only in the case of a new company taking over properties from a former company in exchange for capital stock if the properties or portions of them were soon afterwards sold at a book profit. Otherwise profit on the sale of capital assets would ordinarily be a credit to the miscellaneous earnings of the year in which it was realized. Premium surplus, if substantial in amount, should be shown separately from capital surplus arising from other sources.

Bonded and Mortgage Debt

The verification of funded indebtedness involves the preparation of a schedule summarizing all funded indebtedness outstanding and separate schedules for each issue of bonds or other long-term indebtedness (see Schedules *BB* to *BB-2a*, inclusive, Appendix A and Exhibit *15*, Appendix B). Certificates verifying the amount of bonds outstanding should be obtained from the various trust companies which act as trustees under the deeds of trust. A copy of each trust deed should be examined to see whether or not any special provisions regarding sinking funds, redemption of bonds, etc., are being properly carried out and all transactions with reference thereto are properly recorded.

The balances of each issue at the beginning and at the end of the fiscal period should be agreed with the general ledger trial balance figures, and all transactions relating thereto should be fully accounted for in the working schedules. When bonds are purchased and canceled the auditor should see the cremation certificate or the canceled bonds or should obtain a letter from the trustee concerning the disposition of the bonds. Oftentimes when bonds are

called they are not all turned in at once to the trustee, and the trustee may merely hold the bonds which have been received until it is convenient to cremate them.

It is quite important to show in the balance sheet or by means of an exhibit attached thereto the various maturity dates of bonds and mortgages, for such facts are usually closely noted by bankers.

The accrued interest should be calculated, or the client's calculations should be verified. The auditor should also ascertain whether the interest on outstanding bonds at the last interest date was paid or not. The deed of trust or trust indenture will show when the interest was due and the payment should be traced into the cash book.

Mortgages and judgments should be verified by an inspection of the public records, for their chief value lies in the fact that upon registry they become a lien. Part payments on mortgages must likewise be registered or recorded or the entire amount remains a lien. When judgments have not been entered in the books it is proper to refer to them in a footnote in the balance sheet.

Treasury Bonds

In verifying treasury bonds the auditor should begin with the balance as per the general ledger trial balance at the beginning of the period under audit. He should analyze in detail the additions of the year, seeing that each debit to the general ledger account is fully explained. The purchases should be entered at cost price. Both the par value and the purchase price of all repurchases of the year should be shown (see Exhibit *16*, Appendix B).

In case of sales made during the period under audit both the par value and the sales price of all bonds sold should be shown, and all credits to the general ledger account should be explained. All adjustments to the profit and loss account for the difference between the cost price and sales price of the bonds sold should be carefully observed. The interest for the year, as recorded in Exhibit *16*, should also be noted.

The bonds held at the time of the audit should be verified by inspecting the bonds on hand and in the treasury. In case the bonds were not counted with the cash and other securities at the close of the fiscal period, the cash book should be scanned for receipts on account of bonds sold between the close of the period under audit and the date of the actual count or examination.

Brokers' advices should be inspected in order to support the cash-book entries. All debit entries to the account since the close of the period under audit should also be analyzed, and all brokers' advices for additional purchases should be seen. By adding to the bonds on hand at the date of the count those sold since the close of the period under audit, and then deducting the purchases since that date, the bonds on hand at the close of the period under audit may be determined. The auditor should satisfy himself that treasury bonds are not included in the cash amount, for this is done occasionally and may give an entirely false impression of the cash position of a company.

In the balance sheet the item of treasury bonds should be stated separately; it is usually shown as a short-extension in the balance sheet and is deducted from the outstanding bonds.* The difference between the purchase price and the par value of the bonds is usually adjusted through the profit and loss account, or it may be adjusted entirely or in part through the bond discount and premium account. In case a company's own bonds are held in other special funds, they need not be deducted from the total bonds outstanding but would be valued as any other fund investments. However, since it is the purpose of a balance sheet to show a company's relation to the outside business world it is preferable to deduct true treasury bonds from the total issued bond indebtedness, thus showing the net funded debt outstanding in the hands of the public.

Conclusion

This chapter has outlined briefly the procedure in verifying two of the most important items in the balance sheet: capital investment and funded indebtedness. To the inexperienced auditor it may seem that because the entries to these accounts are relatively few the verification is correspondingly unimportant — such an opinion is entirely wrong. Some very large defalcations, and manipulations as well, have been brought about by tampering with the capital accounts, and every reasonable precaution should be taken by the auditor in his examination to assure himself that all transactions are regular and proper. Anything less on his part is inexcusable.

* See Chapter XI and the balance sheets, APPENDIX A.

CHAPTER X

CURRENT LIABILITIES SCHEDULES*

Notes Payable

In verifying notes payable the auditor should ask for the company's list of outstanding notes as of the close of the period under audit and, as well, the schedules of interest prepaid or accrued. This list should then be checked with the register of notes payable, and the net total of the list should be agreed with the general ledger trial balance amount. In checking the notes it is well to distinguish between trade notes given to creditors for the purchase of goods and notes given merely for financing purposes.

If no list of notes payable is available the auditor should prepare one from the notes payable register, listing all notes that are outstanding and all items paid since the close of the fiscal year. This should be agreed with the general ledger trial balance figure. At the same time the rate of interest should be inserted in the schedule, in preparation for computing or verifying the interest accrued or prepaid at the close of the period under audit. The reader should study Schedules *CC* and *CC-1*, APPENDIX A, and Exhibit *17*, APPENDIX B.

The auditor ordinarily should have confirmation letters prepared and sent to holders of the company's notes. An exception would be a company issuing notes through a broker, in which case a single certificate from the note-broker would constitute a satisfactory verification of the notes outstanding. As rapidly as the certificates or confirmations are received the items on the list of outstanding notes covered thereby should be checked off. All interest payments, discount, etc., should be scrutinized to make certain that such items do not relate to any notes *not* entered in the books.

All notes paid during the period under audit should have been canceled—inspection of the paid notes is the best proof that this has been done. This is important, for unless the notes have been definitely canceled it is possible for them again to be put into circulation.

* See *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 16–20.

All collateral pledged for notes outstanding should be confirmed. The holders of the notes or the brokers through whom the notes were sold should be asked, when they confirm the existence of the notes, to specify any collateral held (see Schedule *CC-1*, APPENDIX A). Any securities or other property so pledged should be referred to in the balance sheet prepared for certification. A simple pro forma letter for obtaining a certificate for notes payable is as follows:

> ....
>
> ....
>
> *Gentlemen:*
>
> To assist in the usual annual audit of our accounts will you please notify our auditors, Messrs. Scrooge & Marlowe, of the extent of our liability to you as of....................19..... Kindly show each note separately and state what security for the notes, if any, is deposited with you.
>
> Your compliance with this request will be appreciated.
>
> Yours very truly,
>
> ....
>
> *Secretary or Treasurer.*

Whether or not the requests for all such letters of confirmation will be written by the client or will be prepared by the auditor and approved by the client is somewhat immaterial and may depend upon circumstances; usually, perhaps, such requests will be prepared by the client. Except as stated in the "Note to Reader" on Schedule *CC*, APPENDIX A, all confirmations should be addressed to the auditor.

It is important that the auditor, when verifying notes payable, ascertain what is necessary to make notes valid, i.e., what officers are authorized to sign notes. If it is found that a single officer may sign notes, it should be reported to the person in charge of the audit in order that the matter may be taken up with the client or included in the report.

Computing Interest

Interest accrued or prepaid on notes payable must be computed or verified by the auditor. In this verification it is desirable to make the computations with as great rapidity as is feasible, and such facility with figures may be quite easily acquired. Suppose, for illustration, that there are numbers of outstanding notes on which the interest is to be computed. If exact interest is to be obtained, the principal must be multiplied by the rate per cent. and this result by the number of days for which the interest has

accrued and this product be divided by 365. Instead of making the division by 365 for each computation, however, the assistant will save much time by grouping the notes according to the rates of interest and adding together all such products of principal and days accrued. He should multiply each total by the respective rate per cent. and then make a single division. If simple interest is computed the final result is the more easily obtained.

In practice the client often will compute the interest for the entire period of the note and then roughly approximate it by months, so that the auditor's computation may not be in entire agreement with that of the client. However, unless the error is relatively important no correction need be made in the client's figures. It is important, not only in computations such as that of interest but in all arithmetical work which the assistant does, that he be familiar with practical arithmetical short-cuts and efficient in making computations. Such knowledge and ability is a great asset to any assistant.

Notes for Other Than Merchandise and Current Loans

It is an interesting question whether or not current notes payable for other than merchandise or supplies and current loans should be shown as a trade debt. If it is desired to show as one amount the current trade liabilities, the notes issued for purposes of financing, etc., should be shown separately. If it is desired to show how much cash will be needed within, say, the coming year, not only short-time financing notes, but also funded debt maturing and to be retired within the coming year should be included as current liabilities. The item probably would appear as a separate amount in the balance sheet if the notes so issued represented a substantial part of the total short-time debt outstanding. The verification of such notes would be similar to that of trade notes payable.

Accounts Payable

Current accounts payable are composed of (*a*) amounts set up in the books from bills rendered from without the business, and (*b*) amounts computed by the business itself, for which bills have not been rendered at the time of entering the amounts in the books, if they will be rendered at all. Vouchers payable are typical of the former; commissions payable, interest accrued and provision for federal taxes are typical of the latter. Ordinarily the latter group of payables, because of the manner of determining them, will re-

quire more careful verification than the former; and the verification where a good voucher system is in use will differ somewhat from that in case there is no such method of recording current payables.

When Voucher System is Used

Before beginning the verification if a voucher system is used the auditor should inquire into the voucher procedure—who prepares, approves and enters the vouchers. Where the true voucher system is used there will usually be no creditors' or accounts payable ledgers, but all unpaid items will be found listed in the voucher register and not yet marked "Paid." In practice it is not uncommon to find a subsidiary accounts payable ledger used in conjunction with the voucher register. The balance of vouchers payable may be obtained from the general ledger trial balance, either as a separate amount or combined with other items of current payables.

The auditor or his assistant should list from the voucher register all items unpaid as of the close of the period under audit or should check the list as prepared by the client's office force. The total of this list should be agreed with the general ledger trial balance. All debit balances included in the total of accounts payable should be carefully investigated, for not infrequently these amounts represent payments on account of bills which should have been set up in the books but, for some reason, have not been approved for entry.

In preparing or checking the above list all items not properly included as trade accounts payable should be earmarked and then otherwise classified. Proper transfer entries should be prepared for these items. It will ordinarily be found that even though the best kind of voucher system is in use, the final figure for accounts payable will contain items other than vouchers payable. The following summary typifies the different items that ordinarily will compose the accounts payable amount in the balance sheet (see also Schedule *DD*, Appendix A):

SUMMARY OF ACCOUNTS PAYABLE AS AT..........19..

Balances per previous period's audit	Captions	Per general ledger trial balance	Transfers to effect proper classification	Adjustments by auditor: Increases or decreases (red)	Balances as per balance sheet
$	Trade creditors	$	$	$	$
	Wages accrued (show full details of dates and amounts used in calculations) . .				
	Salaries accrued (do) . . .				
	Commissions accrued (do) .				
	Taxes accrued (exclusive of federal taxes)				
	Provision for federal taxes (when not shown separately)				
	Owed to officers and employees				
	Owed for Liberty bonds . .				
	Interest accrued (from notes payable schedule) . . .				
	Miscellaneous creditors (specify)				
	Credit balances of accounts receivable ledgers				
$	Totals	$	$	$	$

It is not probable that all the above items will be included in any single schedule, and the subdivisions must be taken as merely illustrative of the results the auditor may obtain when he has completed the analysis of the accounts payable general ledger account. Some of the above divisions represent bills supported by vouchers, while others are computed entirely by the company.

Upon completing the analysis of the book account the auditor should obtain all vouchers entered since the close of the fiscal period and all unentered bills. All these which are dated prior to the close of the audit period and all invoices covering items which an examination of the receiving records shows were received

prior to the close of the year or were in transit (that is, ordinarily, having passed the f.o.b. point) should be listed and analyzed in accordance with the summary which will have been prepared for all payables (see Schedule *DD-4*, Appendix A). The auditor *should give special attention to bills for services, for although the bills may be dated some time in the new period the services were almost of a certainty rendered during the period under audit.* All other items found that are applicable to the past period should be included in this list of liabilities not taken up in the accounts. As a typical illustration, in the audit of a textile company for the year ended December 31, 1921, the January, 1922 vouchers were examined and the auditor found more than $8,000.00 of bills applicable to the fiscal year 1921. These invoices were scheduled approximately as illustrated in Appendix A. In preparing such a schedule the auditor should show by proper checks or by notations that the vouchers have been examined, and he should trace to the cash book any payments therefor.

It is also well to scrutinize the expense accounts for the last large debit that appears in them, for this oftentimes will give a clue to charges which should have been entered in the accounts at the end of the year but have not been entered at the time of the audit. For instance, if it is found that a comparatively large charge is made to the power account near the close of each month, but that at the end of the fiscal period no such charge appears, it is probable that the invoice has not been received or that it has not been entered in the voucher register.

Likewise the auditor should scrutinize all charges other than for vouchers payable which were entered in the cash book immediately following the close of the year or other period under audit, for by this means additional charges for the fiscal period may be discovered. It is also well to scrutinize the receiving records for the last week or for the last two or three days of the fiscal period, or to secure from the storekeeper a statement of goods received, in order that substantial items may be traced to see whether they have been entered in the books or not. The auditor should see that goods were actually received or were in transit in the case of vouchers for large amounts entered during the last few days of the fiscal period. As stated in Chapter VII with reference to accounts receivable, the auditor should not forget to include in the total of accounts payable the credit accounts receivable balances.

Approval of Vouchers

To assist in the audit of accounts payable it is well to obtain a list of all persons authorized to approve vouchers for payment and, when feasible, the actual signatures (usually initials) which are used in making the approval should be obtained. In the case of one audit for the period ended December 31, 1920, four such copies were obtained with actual signatures (initials) on each sheet of paper. The auditors in checking the vouchers could thus readily ascertain whether or not the vouchers were properly approved for payment.

Missing Vouchers

All missing vouchers should be listed and the prepared list should be handed to an employee of the client with the request that the vouchers listed thereon be found and presented to the auditor. The schedule used in the audit of a steamship company as of December 31, 1921, to record lost or missing vouchers was as follows:—

MISSING VOUCHERS

Date of voucher	Voucher No.	Details	Amount
			$

As vouchers are found, a line is usually drawn through the missing item. As many as possible of the vouchers should be found and checked off before the completion of the audit. Even though all vouchers are not found and canceled on the list, the working sheets should be retained and included in the accounts payable group in the working file.

When Voucher System is Not Used

When a voucher system is not used the auditor should obtain the trial balances of the subsidiary accounts payable ledgers and should check the items appearing thereon with the ledger accounts (see Schedule *DD-1*, APPENDIX A). The net totals of the trial balances should be agreed with the controlling account in the general ledger trial balance. In checking the ledgers the auditor

should note particularly the character of all debit balances and should make special record of them in his working papers, for, as already stated, such amounts not infrequently represent payments for bills which should have been entered in the books, but, for one reason or another, have not been entered at the close of the period. Unless negligible in amount, or unless offset by other credit balances of the same parties, these debit balances should be transferred to and be shown as accounts receivable in the balance sheet.

The accounts payable should be classified or grouped in accordance with the summary schedule to be prepared and made a part of the working papers. An illustration of such a summary schedule has already been given. Also, when a voucher system is *not* in existence *all* cash payments after the close of the year must be scrutinized to allocate to the period under audit any amounts that represent expenses or charges applicable thereto. Except as above outlined the procedure in the verification of accounts payable when a voucher system is *not* in use would be similar to the methods outlined for use when there is a voucher system.

Dividends Declared and Paid

During the verification the auditor should ascertain from the minutes of the company the dividends that have been declared and from the accounting records those that have been paid during the period under audit. In case dividends have been declared but have not been paid, the liability should usually be included as one of the items making up the current liabilities. As stated in the previous chapter, in case of cumulative preferred stock outstanding, it is necessary to note in the balance sheet, preferably just underneath the item of preferred capital stock, any dividends accrued but not declared. Schedules should be prepared showing all dividends, both on the common and on each class of preferred stock outstanding, declared or paid during the audit period. This schedule may be as follows:

DIVIDENDS—COMMON STOCK

Date declared	Date payable	No. of shares	Dividend No.	Dividend %	Dividend amount
					$

Contingent Liabilities

Some of the more important contingent liabilities which the auditor should verify, or of which he should ascertain the existence, are notes discounted, endorsements, guaranties, unsettled lawsuits, and unfulfilled contracts. In the case of notes discounted, verification may usually be obtained through the banks which have discounted the notes. The existence of endorsements should be ascertained by inquiry from officers or partners as to the policy of the business with reference to endorsements. Special attention should be given to cases in which the partners or officers are interested in other enterprises. The auditor will often be told that no such obligations or liabilities are in existence, but further confirmation should always be made by obtaining from the client a certificate to the effect that all liabilities including contingent liabilities have been taken up in the books or, at least, have been made known to the auditor. This certificate should be signed by the president or by some other qualified officer of the company (see Schedule *DD-5*, Appendix A).

The verification of warranties or guaranties and of unsettled lawsuits should follow the same general lines as that of endorsements. In the case of unfulfilled contracts the auditor should ascertain for what purposes the contracts were made and what effect the receipt of the goods covered by the contract will have on the financial standing of the client. To illustrate, if the contracts call for raw materials to be used in the manufacture of product which has already been sold, such materials will very probably not affect adversely the financial condition of the business, and they may help it. On the other hand, if the client is a dealer whose shelves are already filled with slowly moving goods, unfulfilled contracts for additional goods of the same kind might seriously affect the cash position or general financial rating of the company. *The auditor should remember that contingent liabilities are apt to be unreported, and that they therefore require much greater and more careful verification* than do assets of any kind. The greatest imagination, tact and judgment often are necessary to obtain the information which it is essential to have.

Borrowings, damages, additional liability for taxes, royalties, legal fees and similar items should also be covered by the certificate obtained from the company. Separate certificates usually should be obtained for different kinds of items—for instance, certificates

for inventories might be signed by the comptroller and general superintendent or works manager or by the treasurer and comptroller (see Schedule *D-1*, APPENDIX A), whereas the certificate relating to all ascertainable liabilities and particularly with respect to infringement of trade-marks or patents, lawsuits for damages, etc., should be signed by the president and secretary or by the president and comptroller, or by similar officers of the company. In the case of such liabilities it is probable that only the senior officers would know of any contingencies existing (see Schedule *DD-5*, APPENDIX A).

Accrued Interest

Although the verification of interest payable on bonds and on notes payable has already been discussed and has been illustrated by reference to the exhibits shown, there are other items, such as past due accounts payable, judgments, over-due taxes and the like, which may bear interest. The auditor should ascertain if any such accounts exist, and, if so, should compute or verify the amount of interest thereon.

Accrued Taxes — Ad Valorem and Miscellaneous

Strictly speaking, real estate taxes do not ordinarily accrue—that is, if a property was sold on the day before the tax assessment was due the seller would not be legally liable for any taxes whatever, except in the case of a few states where the seller of real property is liable for a proportional part of the year's taxes (and except for special provisions in contracts with the purchaser). In accounting, however, it is entirely proper that this tax should be *equalized* or apportioned over the twelve months making up the fiscal period of the tax, and it is in this sense that such taxes are accrued.

The amount of the tax accrued should be ascertained from an examination of the latest tax receipts, or it must be estimated on the basis of the payments during the period. The auditor should determine the period covered by the tax assessment, making inquiry, if necessary, of the proper taxing authorities. In cases where the fiscal term of the tax is not ascertainable, it is best to prorate the tax over the fiscal year of the company. Oftentimes the auditor can learn what the assessment and local tax rate will be for the coming period so that the amount of the accrual, based

on equalizing the charges between months, may be computed quite closely and set up as a liability in the balance sheet. In some states taxes are assessed in one year and are payable one or two years later, so the auditor should take care that several years' taxes are *not* included as accruals in the balance sheet. The calculation of accrued taxes should be scheduled, and all tax payments made during the year should be shown in detail, with a sufficient description to indicate the character of tax and the period covered. Vouchers or receipted bills for all taxes paid should be seen. The taxes paid and/or accrued should be agreed with the ledger account.

Federal or State Income Taxes

The auditor in charge should ascertain shortly after beginning the audit, if it has not been determined before, whether or not the client desires the auditor to prepare the income tax returns of the period. He should assure himself that the taxes of past years have been correctly computed. If it is found that the taxes have been incorrectly computed the matter should be taken up with the client; if possible, revised returns should be prepared; and the additional liability for federal or state taxes should be taken up in the books. If this is not done it may be necessary to qualify the certificate. The auditor should ascertain to what date the government has checked the accounts and should obtain or see a copy of its report.

In case there is a reserve for federal taxes account the auditor on the work, subject to instructions from his principal, should make an analysis of the account, showing the balance at the beginning of the taxable period, the provisions for the year and any other credits made to the account (giving full analysis of how these credits were determined), payments (supported by tax notices, cheques, etc.), and the balance of the account at the close of the taxable period. The working papers should always contain a schedule showing a reconciliation between the book profits and those used for income-tax purposes.

Miscellaneous Accruals

As stated in the Bulletin of the Federal Reserve Board other accrued expenses may be found which it will be necessary to verify. Such verifications must be made in accordance with the necessities of the individual assignment. A knowledge of auditing procedure

should enable the auditor to verify any additional items of accrued expense which may arise.

Conclusion

In concluding this chapter it is well to emphasize again the importance of correctly ascertaining, for the purpose of the balance sheet, the total amount of current debts and accruals as of the close of the fiscal period. The auditor must use every practicable means of ascertaining outstanding liabilities, about which a client will often be more reticent than he would concerning correspondingly important assets. The certificate of liabilities which should be obtained from executives of the company does not relieve the auditor of his responsibility but merely serves as an additional evidence that liabilities are not being knowingly concealed. An understatement of liabilities may so change the ratio between current assets and current debts as to misstate the cash position of the client; the auditor should use all his skill and technical knowledge in satisfying himself that these items are properly stated in the balance sheet.

CHAPTER XI

The Reserve Schedules

Meaning of Reserves

For purposes of the balance sheet the term "reserves", as commonly used, includes three different types of items. First, there is the reserve which "measures the hole" in some asset account, typical of which are the Reserve for Depreciation and the Reserve for Bad Debts. So far as the *net* book value of the assets is concerned such reserves might just as well be deducted directly in the general ledger from the assets affected by crediting the amount of the reserves to the asset accounts themselves; however, since the amounts of the reserves are to a large extent estimates based upon the judgment of the client or of the auditor, and also since it is desired to show always the cost (in case of properties) or the original charge (in the case of accounts receivable), the asset accounts are not reduced but the contra reserve accounts are set up in the ledger.

Second, there is the reserve that provides for some specific liability or group of liabilities which has usually not been entered in the books but is known to exist, the amount of which may or may not be exactly determinable. Typical of this is the Reserve or Provision for Federal Income and Excess Profits Taxes. A reserve of this kind is really a misnomer, for it represents a current liability, and, as stated in Chapter X, if the item is not shown separately in the balance sheet it will be included in the Accounts Payable.

Third, there is the reserve which represents merely the setting aside or withholding of actual profits for some specific purpose or the segregation of net profits or surplus for additions to working capital or to property and plant. Typical of the former is the Reserve for Sinking Fund (when it does not supersede or replace the provision for depreciation) because it represents ordinarily the setting aside temporarily or permanently of actual profits. Typical of the latter is the Reserve for Plant and Additions and the Reserve for Working Capital. One nationally known industrial

carries a Reserve for Renewal of Plant, which is in addition to the provision for depreciation and would appear to provide for the higher price level at which plant probably will be replaced. If the *cost* of the new plant is charged to property account this reserve will remain undisturbed and will, in effect, constitute an appropriation of surplus. In the published balance sheet of the American Locomotive Company, December 31, 1921, for illustration, there appears an account entitled "Reserve for Additions and Betterments, $2,445,502.87", while in the published balance sheet of the American Beet Sugar Company, March 31, 1922, is a "Reserve for Working Capital, $2,043,318.48." These two reserves are merely *appropriated surplus* amounts; similar appropriations are so termed in the published balance sheets of the United States and Bethlehem Steel Corporations. In the published report of the Bethlehem Steel Corporation for December 31, 1921, there appears "Surplus appropriated for and invested in additions to property and working capital, $70,000,000.00", while in the published balance sheet of the United States Steel Corporation, December 31, 1921, is the caption "Appropriated Surplus to cover Capital Expenditures—invested in Property account—Additions and Construction, $140,898,914.10." These two captions possess the merit of telling exactly what the account represents.

The reserves representing profits or surplus appropriated, it may be interesting to observe, are oftentimes of two kinds, (*a*) those usually measuring or reflecting specific assets, such as the Reserve for Sinking Fund, Reserve for Pensions, etc., and for which specific assets are segregated to a special purpose, and (*b*) those for which no specific assets are set aside. Typical of the latter are the Reserve for Contingencies, Reserve for Working Capital and other similar reserves.

It is not the purpose of this chapter to discuss terminology. However, it should be observed, these groups of reserves will frequently overlap or will merge into each other. Also, one should remember that it is the client's balance sheet which is being audited and that usually the auditor will not determine the terminology which is used in it. But, in passing, it may be pointed out that the term "reserve" may preferably be used for the so-called reserves measuring the "holes" in contra asset accounts and for similar charges against gross revenue; the term "provision" may be used for the second group providing for some specific liability

or group of liabilities definitely known to exist, the exact amounts of which may or may not be known; and the term "surplus reserved" or "surplus appropriated" may be used for the true appropriation of surplus profits account. Thus, we would have (*a*) a Reserve for Depreciation, (*b*) a Provision for Federal Taxes and (*c*) Surplus Reserved for Sinking Fund or Surplus Appropriated for Working Capital.

The arguments for and against such terms will not be discussed, but it is desired that the reader shall appreciate the difference in the *real* meaning of the various reserves appearing in a balance sheet. The Provision for Federal Taxes is now quite commonly used, appearing as separate items in such balance sheets as the Advance-Rumely Company and the J. I. Case Threshing Machine Company as of December 31, 1920. When not shown as a separate item, it is usually included in the Accounts Payable total.

The More Common Reserve Accounts

The reserve accounts almost universally found in balance sheets are the reserve for depreciation and the reserve for bad debts. These reserves should be deducted from their contra asset accounts, and in this volume have been discussed with the cost of properties and the accounts receivable, respectively. It will be unnecessary, therefore, to discuss them further in this chapter.

Other generally so-called reserves which have become more or less common in American balance sheets are

- Reserve for Federal Income Taxes (a liability)
- Reserve for Sinking Fund
- Reserve for Insurance (subdivided)
- Reserve for Loss on Exchange
- Reserve for Depreciation of Inventories
- Reserve for Unrealized Intercompany Profits on Inventories
- Reserve for Depreciation of Securities
- Reserve for Good-will and Patents
- Reserve for Invention and Development
- Reserve for Loss on Commitments
- Reserve for Contingencies

There are other reserve accounts that might be named, but the above group illustrates the types of reserves the auditor may ordinarily expect to find in general ledger trial balances presented

to him. A reserve can be placed in the ledger for any purpose desired, merely by charging operating income or surplus and crediting the desired reserve account. In auditing one company more than forty such reserves were found in the books of account. The above list of reserves does not include appropriated surplus under such headings as Reserve for Working Capital or Reserve for Capital Additions.

The Reserve or Provision for Federal Income Taxes, as has already been stated with reference to current liabilities, is based upon the exact or approximate computation of the federal income and excess profits taxes. The Reserve for Sinking Fund will receive later consideration and so will not be discussed at this time.

The Reserve for Insurance or Self-insurance Reserve will be found where a company carries a portion or all of its own insurance. This will usually be done only when a company has a composite and somewhat scattered plant, so that, based upon the law of averages, it is improbable that a greater property value will be destroyed by fire or otherwise than the aggregate premiums on all plants over a series of years. Insurance, as is well known, does not decrease the social loss from fire or storm—it merely distributes that loss over a larger group, and each policy holder bears a small portion of it through the premium which he has paid. When, therefore, a company has a sufficient number of scattered properties, it can afford, perhaps, to carry its own insurance by charging operations and crediting a Reserve for Insurance or similar account for what it would otherwise have paid in premiums or for some arbitrary amount. Separate reserves usually should be carried for fire insurance, for liability and compensation insurance, for theft insurance, etc.

The loss on exchange, which represents the loss from a lower rate of exchange at the close of the fiscal period than that at which transactions in that exchange were recorded in the books originally, can be computed. Likewise, the depreciation in the value of current investments can be determined. Reserves should be set up for the amount of such losses. These reserves, temporarily at least, measure "holes" in contra asset accounts. Likewise, the loss on inventories and on commitments may be determined quite closely, as previously explained, and reserves should be provided accordingly. Intercompany profits on inventories which

have not been realized may also be computed approximately and the amount set up as a reserve.

A reserve for good-will and patents, when used at all, is usually set up not to measure depreciation but to permit the writing down of these items to a nominal value in the balance sheet. This is the practice of the General Electric Company, the Eastman Kodak Company and others. Such procedure permits the companies to show the actual cost to date of good-will and patents, and thus to have the data available for various purposes, (for illustration, when such information was needed for computing invested capital for excess profits tax) but to show only a nominal value for these items in the balance sheet. Thus, one company in its published balance sheet as of December 31, 1921, stated the items of good-will and patents at no value, yet in its ledgers showed total asset values and, as well, total reserves for good-will and patents of approximately $15,000,000.00. The General Electric Company, in its published balance sheet as of December 31, 1921, shows patents and franchises as follows:

Patents and franchises	$2,515,975.93	
Less — Reserve	2,515,974.93	$1.00

These cases illustrate the function which such reserves perform in many instances.

Reserves for invention and development would ordinarily be deducted from current earnings and would provide for charging future expenditures against them. Until actually utilized such reserves represent appropriated surplus profits.

The Reserve for Contingencies, which may or may not represent a specific provision, is usually for a round sum. In so far as it represents a provision for a known contingency or for liabilities known to exist, of which the amounts cannot be definitely determined, the reserve measures an actual or possible liability, but otherwise unless and until the amount is used it represents the reservation of surplus earnings of the company (see Schedule *HH*, Appendix A). To the extent that the amount takes care of a known contingency the reserve should be provided from gross profits or earnings; otherwise it should be set aside directly from net profits or surplus. The earnings statement should show whether or not the net profit is sufficient to provide for special reserves of this kind to the extent to which such reserves are really needed, but not when the reserves merely measure surplus appro-

priated and withheld from distribution as dividends. It would appear sometimes that the sole purpose of the Reserve for Contingencies is to reduce the unappropriated earnings available for dividends.

Analysis of Reserves

In analyzing reserves, therefore, the auditor should be certain that he understands the purpose and nature of the reserve accounts appearing in the ledgers. His analysis may be scheduled somewhat as follows:

ANALYSIS OF RESERVES

Name of reserve	Balance 12/31/1921 per auditor's working papers	Additions 1922 by charges to P. & L.	Transfers from other reserves		
			Explanation	Debits	Credits
	$	$		$	$

DECEMBER 31, 19. . .

Other entries			Balance, 12/31/22	Remarks
Explanation	Debits	Credits		
	$	$	$	

In case there are during a period numerous entries which affect any reserve account a separate schedule may be necessary for that reserve. As stated in previous chapters with reference to reserve accounts, the auditor should give careful consideration to the sufficiency of the requisite annual provisions; particular attention should be given to any contractual obligations regarding sinking fund or pension reserves, etc. He should trace and analyze fully all entries to the accounts during the period under audit (see Schedules *FF*, *GG*, and *HH*, APPENDIX A).

The Reserve for Sinking Fund

A sinking fund provides, usually by annual contributions made

in accordance with the terms of a deed of trust or other agreement, the funds to be used for some specific purpose, as, for illustration, the funds to be paid to trustees for the purpose of extinguishing bonded indebtedness before or at maturity. Inasmuch as in most cases, however, the only feasible source out of which such funds may be provided is surplus earnings, it is not unusual to provide in a deed of trust that a Reserve for Sinking Fund shall be provided out of the earnings of the year. In such case the reserve account usually *measures* the amount of the sinking-fund accretion for the year, and this amount of cash or other assets, less any interest realized by the trustee on funds in his or its possession, is then paid over to the trustee.

The auditor should familiarize himself with the sinking-fund provisions of the deed of trust and see that those provisions have been carried out exactly. The working schedules should show conclusively whether or not all such provisions have been met. The more common practice, instead of building up a large fund of assets in the hands of the trustee, is to use the annual provisions for the sinking fund in acquiring the corporation's own bonds, for (*a*) this best accomplishes the purpose for which the sinking fund was provided, namely, to retire the funded debt outstanding, and (*b*) a higher interest return may be obtained than any trustee, probably, would be justified in seeking if the funds were invested in other securities. Thus, if a sinking fund were provided to retire an issue of 7% debenture bonds, the trustee would be entirely justified in purchasing those bonds for the sinking fund, whereas if the funds were invested in other securities it is probable that a government or municipal 3½% or 4% bond or similar security would be sought.

If the sinking fund is used to purchase the company's own bonds, the bonds so acquired may better be deducted in the balance sheet from the total amount outstanding, rather than be shown as an asset. This procedure is followed by many companies—for illustration, the Bethlehem Steel Corporation shows in its published consolidated balance sheet, December 31, 1921, its funded indebtedness as follows:

Funded and Secured Debt:			
Total issue		$292,930,524.83	
Less — in treasury or pledged as collateral	$95,872,600.00		
Purchased for sinking fund or canceled	50,894,033.33	146,766,633.33	$146,163,891.50

As stated in Chapter V, a certificate from the trustee as to the condition of the fund is sufficient evidence for the auditor, so far as an examination of the cash and securities is concerned. If the purchased bonds have been canceled and surrendered to the company the auditor should examine them as described in Chapter IX.

Relation of Reserve for Sinking Fund to Depreciation

It is an interesting question how far, if at all, the reserve for sinking fund makes unnecessary a separate provision for depreciation. Sir Arthur Lowes Dickinson says that it is "desirable that the amount applied each year to sinking-fund purposes should be offset by the retention in the business of a corresponding amount of profit, which should be transferred either to a special reserve or in reduction of some fixed asset account by way of provision for depreciation or otherwise."* The sinking-fund provision may be used as a provision for depreciation (*a*) in case of a single-unit plant which will probably not be replaced, as, for instance, when a company owns and operates a single steamship; (*b*) in the case of the depletion of wasting assets, etc., and (*c*) where property is tributary to other assets, as where mine shafting is tributary to the wasting asset, or where a tannery is dependent upon a limited supply of bark. Sir Arthur states definitely that "there is no relation whatever between the amount of sinking-fund instalment and the annual depreciation charge; it is therefore still necessary to calculate the latter on the usual principle, and then to consider to what extent the sinking-fund instalment may be properly considered as available to meet this provision." Again it must be remembered "that the provision for depreciation will be to that extent represented by capital instead of current assets." Since the real purpose of any reserve for redemption or sinking fund is to conserve profits and the assets which constitute those profits within the business, and since these profits are eventually, either at the end of each fiscal period or at the expiration of the life of the liabilities, to be turned back into surplus or into a specially earmarked or appropriated surplus, unless used as a depreciation or other special provision, the question naturally arises whether or not it is necessary or advisable to provide both for depreciation and for a sinking or redemption fund. In the instances enumerated above there is not only no need of a provision

* See *Accounting Practice and Procedure*, pp. 148–9.

both for depreciation and for a redemption fund, but to provide for both places a double and an unnecessary burden on the business during the entire period of the operation of the sinking fund.

The United States Steel Corporation, to take a typical illustration, has reversed the process and instead of applying the sinking-fund provision to depreciation, as suggested by Sir Arthur Lowes Dickinson, has applied a portion of the depreciation charges for the year to the sinking fund. Thus, in its published report for the fiscal year 1921, the corporation shows a charge to gross earnings, viz.:

Allowances made from earnings and income for exhaustion of minerals and for depreciation and replacement reserves (includes depletion and depreciation allowances used for bond sinking funds)	$36,776,152.62

Of the above amount, $8,863,180.35 was made applicable for "sinking fund on U. S. Steel Corporation bonds." This amount was shown in the annual report as follows:

Depletion, depreciation and replacement reserve applicable for sinking fund on U. S. Steel Corporation bonds:	
Balance, December 31, 1920	$3,904,154.15
Set aside during 1921 from income and by charges to current expenses	8,863,180.35
	$12,767,334.50
Less—Transfer to depletion and depreciation reserves invested in bond sinking funds for U. S. Steel Corporation bonds	8,768,701.17
Balance, December 31, 1921	$ 3,998,633.33

In this report, which may be taken as representing good American practice, is also a statement of "the trustees' transactions for account of the bond sinking funds of the United States Steel Corporation" for the year and the condition of the funds on December 31, 1921, viz.:

Cash resources in hands of trustees, December 31, 1920		$ 804,160.08
Instalments received:		
Provided from depreciation funds	$8,768,701.17	
Provided from income account and general resources	719,626.39	9,488,327.56
		$10,292,487.64
Bonds redeemed:		
Par value of bonds	$8,689,000.00	
Net premium paid on bonds redeemed	719,626.39	9,408,626.39
Cash resources in hands of trustees, December 31, 1921		$ 883,861.25

It should be observed that the United States Steel Corporation has built up a substantial reserve for depreciation in addition to the portion appropriated for bond redemption purposes, so that at December 31, 1921, the total depletion and depreciation reserves were

Balance in various reserve accounts	$279,979,127.09
Specifically applied for redemption of bonds through bond sinking funds	143,220,979.15
Total depletion and depreciation reserves, December 31, 1921	$423,200,106.24

The total, $423,200,106.24, measures the estimated "hole" in the fixed property account, and this amount was deducted from the "gross fixed property investment account" to determine the corporation's balance-sheet amount for fixed property. As shown by these figures, assets to the extent of $280,000,000.00, approximately, which represent the conversion of the fixed property through productive uses, have been retained in the corporation and are available in more or less liquid form for property replacement purposes or have been invested in other fixed property. The other amount, $143,000,000.00, is not thus available, for the assets have been used for the cancellation of debt, so that now neither the assets nor the debts are in existence (the liquid assets which would otherwise have been on hand having been used for bond-redemption purposes). If these funds are ever needed they may be obtained by again creating funded debt for the amount; in the meantime the corporation has considerably reduced its fixed interest charges. This appears to be very sound procedure, particularly in so far as there are wasting assets not to be replaced. While it must be remembered that the provision for depreciation is represented to such extent by a reduction in funded debt instead of by current assets, the provision in this case is undoubtedly still large enough to make good the exhaustion of other fixed property and plant. Some of the property assets, as stated above, are decidedly of wasting character (mines, quarries, ore fields, etc.), and when this is true "the sinking-fund reserve may be quite safely applied in reduction of the book value thereof. . . ." It is improbable that the whole of the depreciation provision ever would or could be used for property replacement purposes; and it is entirely proper, therefore, that a reasonable portion of the pro-

vision should be represented by a reduction in fixed liabilities instead of by an increase in liquid assets.*

However, the auditor must not fail to perceive that the provision for sinking fund made to retire funded debt and the provision for depreciation made to maintain capital investment arise from absolutely different causes and have no more relation in principle than the payment of any other liability has to maintenance charges. In the income statement the provision for sinking fund is usually an appropriation of earnings and hence not a cost of operations, whereas the provision for depreciation is an operating cost. The sinking fund is maintained to safeguard the market value of the bonds or to facilitate refunding them, and only incidentally can there be any relation between the amount demanded by the investment banker as an adequate sinking-fund allowance and the rate at which the property of the corporation becomes old and useless—hence the need to calculate the depreciation provision "on the usual principle, and then to consider to what extent the sinking-fund instalment may be properly available to meet this provision."

Interest on Sinking Fund

An item often omitted from a company's books is the interest income on the sinking fund in the hands of the trustee. This amount should be recorded on the mortgagor's books (1) in order to have a complete record of the sinking-fund moneys or other assets in the possession of the trustee, and (2) because the interest is taxable income under the Federal Revenue Act. The auditor should not fail to see that this amount is taken up in the books of account.

Other Funds

Any other offsetting funds, corresponding to contra "reserve" accounts, such as insurance or pension funds, should be verified in accordance with the procedure outlined in Chapter V. If the funds are in the possession of a trustee they should be verified by certificate from the trustee. If in the possession of officers of the company, the auditor should inquire into the methods of handling the funds and should see that proper safeguards are provided to prevent improper use thereof. All findings should be fully explained in the working papers.

* See discussion by the author, THE JOURNAL OF ACCOUNTANCY, June, 1922, pp. 425–8.

Conclusion

It has been the purpose of this chapter to outline the fundamental nature of *reserves* and the audit procedure for their verification. No attempt has been made to discuss the mathematics of the sinking fund, for this may be found in many works already familiar to the reader. An auditor, however, cannot intelligently perform his work on an audit without understanding the relation of reserves to the asset side of the balance sheet, to the balance sheet as a whole, and, particularly, to the special accounts which they affect and on account of which they have been created.

CHAPTER XII

Surplus and Profit and Loss*

Sources of Surplus

Capital surplus or paid-in surplus and earned surplus or surplus arising from the regular operations of a business should be clearly differentiated and shown separately in the books and, ordinarily, in the balance sheet. Capital surplus, the verification of which was briefly discussed in Chapter IX, may arise from any one or more of several possible sources:

(*A*) It may be paid in at the beginning of the business either in the form of cash, as is usually the case in the organization of a bank, or by contribution of property of a value greater than the par value of the stock issued therefor. Stock actually issued may also be returned or donated by the stockholders to the corporation. This means, in other words, that the capital surplus was contributed by the proprietors.

(*B*) Capital surplus may arise from outside gifts, although such gifts are comparatively infrequent. When subsidies are granted by states or municipalities, they are often considerable in amount.

(*C*) Capital surplus may arise from the sale of capital assets for a greater sum than the cost of the assets. This would probably be considered a capital surplus only in the case of a new company taking over properties in exchange for capital stock if the properties or some of them were soon afterward sold at a book profit. Profit may also arise on a sale of property because of a real appreciation in the market value of the assets sold, when it may be termed a capital profit, or the assets may have been over-depreciated in past periods, when any material adjustment would be made to earned surplus. In practice the profit or loss on items of plant sold is usually absorbed through the current year's earnings.

(*D*) Capital surplus may be set up in the books by recording an unrealized appreciation in the value of capital assets. Appreciation should not ordinarily be recorded in the books of account,

* See *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 21–3.

but if so recorded the surplus arising therefrom should be earmarked and kept separate from the earned surplus available for dividends.

It is interesting to observe that the capital surplus provided at the time of organization of the United States Steel Corporation, although carried into the earned surplus and shown in the final extension as a single item in the published balance sheet, is yet specifically shown in the balance sheet as "capital surplus provided in organization."

The earned surplus account, under whatever captions it may be recorded, represents the accumulated net profits or income earned in the operations of the business, less dividends declared and charged against the account. It is not improbable that a portion of the earned surplus will have been permanently appropriated or temporarily set aside as true reserves, but all of which forms a part of the real excess of assets over liabilities and a part of the true invested capital of the business.

Audit of Surplus Account

In conducting a balance sheet audit the balances of the one or more surplus accounts at the beginning of the period under audit should be compared with the amounts shown in the previous balance sheet or in the working papers of the previous audit. In case of a first audit the company should be asked to provide the auditor with an analysis of the surplus account from the organization of the business to the beginning of the audit, or for a reasonable period of time. Such a statement will give the auditor a good bird's-eye view of the past operations of the business and will also serve as a check on the property account in so far as surplus adjustments may have been made to that account.

For the current audit, all charges to surplus account during the period should be analyzed fully and the working papers should show in detail the method of determining any adjusted balance as of the close of the period under audit. This reconciliation may be prepared either by means of journal entries, as is perhaps the more common method, or in the form of a reconciliation statement which would show the balance according to the books with all adjustments, either debit or credit, and the final figure which should agree with and support the amount shown in the balance sheet.

Adjustments Not Taken Up by Client

The auditor quite frequently finds that adjustments made with reference to the previous balance sheet have not been taken up in the client's books. This is particularly true in the case of the surplus and of the property and plant accounts, though not infrequently it applies to other accounts also. Until one has given thought to the problem and learned by experience how to treat it he may have difficulty in making up the accounts correctly. It is necessary to adjust the client's books to the figures which the auditor believes indicates the real situation and which he is willing to certify. The exact form such adjustments shall take is not the important point; the following is perhaps as clear and satisfactory as any:

SURPLUS ACCOUNT, DECEMBER 31, 19 . .

Balance, per client's books, beginning of year (date)		$ . . . . .
Auditor's adjustments not taken up:		
Credits:		
A (being cross-indexed to the	$	
B adjusting journal entries)	. . . . .	
C	. . . . .	
Etc.	. . . . .	. . . . .
Debits:		$ . . . . .
X (as above)	$	
Y	. . . . .	
Z	. . . . .	. . . . .
Balance, per auditor's working papers, beginning of year		$ . . . . .
Current additions and deductions: (properly explained and supported by subsidiary schedules, journal entries, etc.)		
Balance, per balance sheet, close of year (date)		$ . . . .

Each item appearing in the foregoing statement should be properly supported by and cross-indexed to subsidiary schedules, adjusting journal entries, etc., in order that the statement may be made clear to anyone who may read it.

If the above form is not used it is equally feasible to begin the statement with the balance per the client's books at the beginning of the period and then to show the current additions and deductions, which would give the balance per the client's books at the close of the year. To this balance may then be added or from it

may be deducted (*a*) the auditor's adjustments for the previous period which were not taken up by the client and (*b*) adjustments which the auditor finds it necessary to make for the current period. The final effect is the same, namely, to support the figure which the auditor is willing to certify in the balance sheet.

A third method which has the advantage of showing both the beginning and closing book figures and, as well, the auditor's adjusted figures is to use a columnar schedule, somewhat as follows:

Surplus Account, December 31, 19..

Explanations	Per client's books	Auditor's adjustments	Final or balance sheet figures
Balance, beginning of period (date)	(1)		(2) . . . . .
Surplus adjustments of period (debit and credit)			
Net Profit for period ended as of (date)			
Balance, close of period (date)	(3)		(4) . . . .

All adjustments by the auditor, as recorded in the center column, would be fully cross-indexed to the adjusting journal entries. As already explained the auditor's adjustments for the preceding period, which have not been taken up by the client, would be carried forward from the previous working papers, and entered (additions in black and deductions in red) at the top of the center column. In case of the surplus adjustments and of the net profit of the current period there may or may not be adjustments by the auditor—perhaps more often than not such adjustments are necessary. Figures (1) and (3), then, represent the opening and closing surplus balances as per the books of the client, whereas (2) and (4) record the final figures shown in the previous and current balance sheets, as adjusted by the auditor. This is an unusually desirable form of working schedule to use in recording such adjustments—whether it be surplus account or some other balance sheet item which is to be adjusted—for it sets forth clearly for the benefit of the principal both the status of the client's books and the extent of the auditor's adjustments.

Additional adjustment statements, particularly with reference

to the adjustment of surplus and profit and loss over a number of periods, are discussed in Chapter XIII and are shown as the final two exhibits in Appendix B.

Statement of Profit and Loss — General Comments

The statement of profit and loss for the period under audit summarizes the changes in the proprietorship of the company which are due to the operations of the period and have taken place during the period. In other words the statement of profit and loss is *historical,* because it shows in condensed form the operating results of the period under audit. The statement of profit and loss (see Schedule *JJ-1,* Appendix A) should show, ordinarily, the gross returns and net returns from sales, the cost of production, the gross profit of the period, the expenses of selling and administration, miscellaneous income and expense and the net profit and income of the period. A statement of additions to and deductions from the surplus account may be included in the balance sheet or it may be appended to the periodical statement of profit and loss, in order that the surplus as shown in the balance sheet as of the close of the fiscal period may be fully explained and reconciled with the surplus at the beginning of the period (see Schedules *JJ* and *Summary of Surplus,* Appendix A).

The extent of detail analysis required in the case of a financial or balance sheet audit will depend upon the system of internal audit and upon the method employed by the client in keeping the accounts. There are companies which close all their income and expense accounts monthly either into Profit and Loss or into a general account, while other companies close out these accounts only at longer intervals—perhaps only at the close of each fiscal year. The method of analyzing the income and expense accounts will therefore vary.

In Appendix A the monthly closing method is assumed, and under such a method all income and expense accounts will probably be analyzed by months. Aside from the fact that such procedure is more convenient, a monthly analysis is largely useless except in the case of sales, purchases, payrolls and for administrative, selling and general expenses. Monthly totals should ordinarily appear in the working papers only (*a*) when it is most convenient to accumulate them in this manner because of the method of bookkeeping in use, and (*b*) when the amounts, such as sales, purchases,

and the other items referred to indicate business tendencies or trends. The latter is obviously the real reason for such monthly accumulations, and is sufficiently important to receive constant attention from the auditor.

The statement of profit and loss, as shown in Schedule *JJ–1*, is further detailed in the working papers following. Frequently the income statement is prepared in comparative form, which is desirable, and oftentimes percentages also are shown. Ordinarily, in the use of percentage statistics in the statement of profit and loss net sales should represent 100%, although occasionally a more significant comparison may be obtained by making gross sales 100%. As shown on the opposite page sometimes both sets of percentages may be shown in the same statement.

In this typical illustration another set of amount and percentage columns might be added to show the comparative figures for the previous period. Several periods may be compared if the client or others are interested in such data.

Use of Percentages in Reports

Oftentimes, as just stated, the use of percentages in the preparation of statements or reports will assist greatly in presenting to the client the essential facts of his business. This is true not only of the use of percentage statistics with reference to the statement of income or profit and loss, but also of statistics concerning production and trading operations. What the particular client desires will largely determine the form the statistics will take, but in each case they should be presented in a form comparable from year to year.

In the use of percentage statistics in the income statement ordinarily 100% should be taken to represent gross returns from sales less customers' returns, sales discounts, price allowances and outward freight. The several items of sales discounts, sales returns, price allowances and outward freight, where possible without too much extra labor, should be listed separately in the income statement, for these several items represent quite different things and have little direct relation to each other.

The percentages, usually, should not be carried more than one or two figures past the decimal point, for additional decimal places have no practical significance and are apt to create the impression that the auditor is little more than a mere calculating machine.

Statement of Profit and Loss

For the Year Ended December 31, 1922

Particulars	Amount	% to Sales Gross	% to Sales Net
Gross Returns from Sales	$	100.00	
Deduct — Commissions, price allowances, and discounts		13.25	
Net Sales	$	86.75	100.00
Deduct — Manufacturing and producing Cost of Sales (per exhibit)		55.38	63.84
Freight and duty on Canadian sales		1.56	1.80
Together	$	56.94	65.64
Gross Profit on Sales new product		29.81	34.36
Add — Profit on Sales old product		1.65	1.90
Gross Profit from Operations	$	31.46	36.26
Deduct — Selling and General Expenses:			
Selling Expenses (per exhibit)		18.20	20.98
Collection Expenses (do)		1.89	2.18
Bad Notes and Accounts		1.00	1.15
General and Adm. Expenses (per exhibit)		2.90	3.34
Reserve for Loss on Exchange		2.60	3.00
Together	$	26.59	30.65
Net Profit from Operations	$	4.87	5.61
Add — Other Income:			
Interest received on Notes Receivable		3.63	4.18
Discount on Purchases		.55	.64
Reserves for Taxes of prior year not required and written back to income		2.60	3.00
Miscellaneous Income		1.38	1.59
Together	$	8.16	9.41
Total Profits and Income before Interest and Income Taxes		13.03	15.02
Deduct — Interest on Debt		2.35	2.70
Net Profit before Income Taxes	$	10.68	12.32
Deduct — Provision for Taxes		.88	1.02
Net Profit for year carried to Surplus Account (balance sheet)	$	9.80	11.30

The auditor should endeavor, in using percentage statistics, to ascertain which basis (for illustration, whether gross sales or net sales shall represent 100%) will give the best comparison of operations between years or between different departments or productive units within a composite organization.

Disposition of Profits

As explained in Chapter III it is of interest to the client to have a statement included in the auditor's report showing the disposition of profits earned and the changes that have taken place in the financial position of the company during the period under review. This should be done especially where there has been any decided change in the balance sheet at the end of the period as compared with that at the beginning of the period. Illustrative statements are shown following the *Summary of Surplus*, APPENDIX A, and as Exhibit *6*, APPENDIX B.

Statement of Profit and Loss — Detailed Verification

Frequently in a financial or balance sheet audit little direct verification will be made of the items comprising the statement of profit and loss. In verifying the inventories and other items in the balance sheet, it is usually necessary to verify to some extent the items appearing in the income statement, and to such extent these items will, of course, not receive further verification. However, some additional verification may be desirable, as outlined in *Approved Methods for the Preparation of Balance Sheet Statements.*

So far as feasible the auditor should prove the quantities of goods sold. This should be done by adding to the purchases or production of the period the inventory quantities at the beginning of the period, deducting the inventory quantities at the close and comparing this result for certain typical products with the quantities sold as per the sales records. This will not generally give an exact verification, but it should give an approximate statement of quantities sold during the year. Any serious discrepancies should be thoroughly investigated. The auditor should also inspect the shipping memoranda to determine that the sales books were closed on the last day of the fiscal period and that no goods billed and shipped at later dates were included in the year's sales.

The auditor should also ascertain whether or not the company is withholding its sales by charging back some of them to the in-

ventory accounts. This was attempted in the case of an American subsidiary of an English company and such procedure led to a complete misstatement of the true earnings and financial condition of the American subsidiary. In a first audit the auditor should assure himself that the sales at the beginning of the period were listed when actually shipped, and he should see the shipping memoranda for verification. As illustrated in the exhibits, trade discounts, outward freight, price allowances and damages or poor quality claims usually should be deducted from the gross sales to obtain the net return from sales.

In verifying sales, it is interesting to look into the future bookings of the company at the close of the period under audit, in order that comparison may be made with former periods. This often will reveal important information concerning the business and probable future earnings of the client.

The cost of sales is ordinarily verified in the case of a balance sheet audit with the verification of the work in progress and other inventories at the close of the period; therefore, little additional verification is necessary with reference to the statement of profit and loss. This is likewise true in regard to depreciation, provision for bad debts, interest received and paid, accrued or prepaid taxes, insurance and other similar items. As has been outlined in former chapters, the policy of the company with reference to sales discounts, price allowances, commissions, etc., will have been ascertained. If further verification of rentals received is desired the auditor should inspect the leases and perhaps the rent rolls. Managers' salaries and directors' fees may be verified from the minute book, office salaries from the salary book, wages paid from the payroll, rents paid from the leases and agents' receipts, traveling expenses from approved statements or expense books, freight from the railway freight bills, and most other items (with the possible exception of taxes and insurance which have already been discussed) from suitable invoices or statements.

Additional Schedules and Working Papers

In case it is desired to make a complete analysis of the items included in the profit and loss statement, schedules may be prepared containing an explanation of each item on the debit and on the credit side of the accounts affecting the profit and loss of the year. Only occasionally would such schedules be prepared, ex-

cept, perhaps, for specific accounts which the accountant in charge of the audit desired to have thoroughly analyzed and verified. If such a schedule is desired the information may be shown as follows:—

NAME OF ACCOUNT

Date of entry	Folio of Journal, cash book, etc.	Explanation	Amount	
			Dr.	Cr.
			$	$

Income Tax Returns

If the schedules prepared on the audit are to be used in the preparation of income tax returns the expense accounts must be somewhat more thoroughly analyzed and the items scheduled in accordance with the income tax regulations. Thus in the case of an industrial company, the working papers showed the general office expenses analyzed by months under the following headings:—

Payroll
Rent
Telephone and telegraph
Postage
Stationery and printing
Subscriptions and donations
Traveling and personal expenses
Legal and professional fees
Miscellaneous expenses

A detailed explanation was given of each important item making up the miscellaneous group. If the office payroll includes the salaries of employees and officers the account should be further divided to show officers' salaries, directors' fees, employees' salaries, employees' commissions, bonuses and so forth. The real point is that the working papers shall contain all information which will be of use in the preparation of the client's report, and, in case the auditor is also to prepare the income tax returns for the client, such additional detailed information as will be needed in the preparation of the necessary schedules to be attached to or made a part of the government return.

Conclusion

This chapter has outlined briefly the general form, content and verification of Surplus and of the Statement of Profit and Loss. It may be well to repeat that the statement of profit and loss is historical in its nature and merely explains the changes due to operations that have taken place in the surplus as reflected in the balance sheets at the beginning and close of the period under audit. It is important in that it explains the *source* of all income and of all items of expense and in that through it the general trend of the business is more clearly revealed than it would be possible to reveal it by comparing only the balance sheets at the beginning and close of the period. While it is unnecessary and usually impossible in a financial or balance sheet audit to make a detailed verification of all items entering into the statement of profit and loss, the auditor (*a*) should satisfy himself that correct methods of accounting are used and (*b*) should make such tests of the items of income and expense for the period under review that he may be reasonably certain that all such amounts are properly reflected in the ledger accounts and in the financial statements prepared by or rendered to the client.

CHAPTER XIII

Miscellaneous Working Schedules

Throughout the discussion of the balance sheet audit and of the verification, general schedules and procedure to be adopted with reference thereto, it has been emphasized that the important duty of an auditor or his assistant is to produce a sensible set of working papers, which will enable a principal or whoever may have occasion to use the papers to acquire a ready grasp of the essentials of the audit with the least effort. This holds true for junior assistants in their relation to senior assistants as well as for managers in their relation to partners; each one should present the result of his work in the most useful form to his senior in rank. Because it is desirable that the one who reviews the work should be able to see at a glance the main changes during the period in the assets and liabilities and whether or not the accounts are prepared on the same basis as in previous years, all leading schedules should ordinarily be prepared in comparative form, showing the balances at the beginning of the period, the additions and deductions separately and the balances at the end of the period. In case there are several plants or associated companies it is likewise desirable, as already stated, to separate the transfers between plants or companies from the additions and deductions. In the case of inventories, accounts and notes receivable and payable, cash, etc., it is usually not necessary to summarize the transactions of the period reflected in these accounts, and the opening and closing balances only are sufficient for purposes of comparison.

This final chapter will be confined to the discussion of certain other forms, labor-saving devices and methods which are employed continually by an auditor.

General Instructions

Upon receiving instructions from a client, whether it be a new or a recurring assignment, an Instructions Received sheet or some record similar to Exhibit *3*, Appendix B should be prepared. The information called for by this sheet relates to the work which is

to be taken up, including the nature of the business of the client and the particulars of the work to be done—that is, whether a balance sheet audit, a detailed cash audit or an investigation for profits or refinancing, etc., is to be undertaken. This should go to the general filing department where it will ordinarily be placed in the general correspondence file. One or more carbons may be prepared of the instruction sheet which should be filed in accordance with the filing methods in use in the accountant's office.

Some kind of memorandum sheet should also be prepared. A form which may be used appears as Exhibit *4*, Appendix B. This sheet ordinarily will be prepared by the person who received the original instructions from the client. It will set forth specifically the information obtained, with any special instructions to be followed by the person who is later to take up the work. In case of recurring work, such as an annual balance sheet audit, the memorandum sheet if prepared at all will probably be prepared by the accountant in charge of the work on the preceding engagement. It may be that no new memorandum would be prepared in case of regular recurring work—special points needing attention may be listed and attached to the working papers for the preceding audit.

These forms (Exhibits *3* and *4*) do not really constitute a part of the working papers of the audit, but they do form a part of the general office procedure and assist greatly in keeping available any essential information as to instructions received from a client.

Labor-saving Devices

An auditor's work is often of such a nature that he may evolve or develop working forms whose primary purpose is the saving of labor. The work, in other words, could be done as well in some other way, but the method adopted for scheduling the information will save time. One such form is shown as Exhibit *18*, Appendix B.

This exhibit, known as a consolidated working balance sheet, may be used to advantage in consolidating the separate balance sheets of a number of subsidiaries or closely affiliated companies or the accounts of a number of branches. The form of the sheet may vary somewhat, but as illustrated the balance sheet items are listed down the left end of the sheet and the names of individual companies or branches are written in the column headings across the sheet. The sheet is arranged so that several cross-additions may be made in computing the consolidated balance sheet figures, in-

stead of requiring a single cross-addition for the figures of all branches or subsidiary companies. In most cases separate sheets would be used for assets and for liabilities and capital.

The sheet, as illustrated, is used annually on one or more engagements where there are approximately forty affiliated companies to consolidate. One sheet is used for assets and a second sheet is used for liabilities and capital. The separate balance sheets of the parent and subsidiary companies are listed on the working sheet in the ordinary manner except that there are no special columns for intercompany eliminations. All intercompany items, both *debit* and *credit*, are listed for each separate company at the bottom of the *asset working sheet* in the respective company columns. The credit items are written in *red* ink and the debit items in *black* ink. When all subsidiary balances have been listed on the working sheet and the auditor is ready to cross-add the sheet it will be found (in case no errors have been made) that the total intercompany black and red ink items, taken together for all companies, will exactly cancel. In the parent company's balance sheet, for illustration, the total investment in affiliated or subsidiary companies would appear as a permanent investment. In the consolidated working balance sheet, however, this total investment, properly adjusted, would appear *in black* as an intercompany item rather than as an investment.

Similarly, the capital stock and purchased surplus of the subsidiary companies, which are represented by the parent company's investment, would appear as intercompany items in the several subsidiary companies' columns *in red* and when the columns are cross-added the items will thus exactly offset each other. In the same manner, intercompany accounts and notes receivable or payable or other intercompany transactions would offset each other and disappear in the final consolidated balance sheet.

Perhaps the greatest value of this working sheet, however, and the purpose for which it was originally devised is that it saves time and labor. Assistants not uncommonly find it practically impossible to cross-add twenty-five to forty columns of figures, and the attempt usually means the loss of a large amount of time. However, if several smaller tasks are made out of such work it will be much more easily performed and will ordinarily be completed much more quickly. As explained on the exhibit, several inserts may be used if desired and it has been demonstrated again and again

that a great saving in time and labor will be accomplished by the use of such a working sheet.

A similar working sheet for associated companies or for branches may be devised by heading the columns with the balance sheet classifications and listing the names of the companies or branches downward in the left-hand columns. The cross footings may then be copied from the individual subsidiary balance sheets and the consolidated totals found by straight additions. However, if the figures on the consolidated working sheet are to be proved correct the necessity for cross-additions is not entirely removed. The occasional use of the adding machine for making laborious cross-additions, or the use of calculating machines in the computing of percentages of costs and expenses to sales, etc., will be advantageous.

Exhibits *19* and *20*, again, illustrate what may be accomplished by constructive thought on the part of an auditor. *No schedule should be drawn up until the person who is to prepare it understands definitely what information is desired and until he has determined in advance what purposes will be served by the schedule which he is about to prepare.* Each of these schedules or others very similar to them have been used for verifying sinking-fund securities held and the income received therefrom. In the case of Exhibit *20* the summary of sinking-fund investments is supported by a detail statement of investments which is made a part of the regular summary schedule —whatever columns are necessary may be added to the right of the summary columns or similarly ruled sheets may be used if the details are too voluminous. Such a columnar schedule not only enables an auditor quickly to agree the aggregate investments and the income therefrom with the general ledger or trial balance figures, but it likewise makes readily available the detail necessary to support the summary of investments. It is important not only that an auditor properly verify the accounts he is auditing, but also that the results of the verification be intelligible to those with whom he may be associated. These schedules are presented not so much with the idea that they will often be found practical or useful, but rather as indicating how a little care in the original determination of the form of a schedule will result in a great economy of effort.

Special Investigations

In making investigations for any purpose it is usually necessary to make adjustments, particularly of income, between different periods. In order to do this most effectively a working schedule of the general form of Exhibit *21*, Appendix B, is useful to an auditor. Such investigations usually cover a period of years and adjustments in the income account should be recorded by means of a columnar statement of this kind. The general nature of the adjustment—that is, whether it is a mere transfer of income and expense items between years or represents additional provision for depreciation or some other kind of adjustment is recorded in the explanation space. The amount, whether a debit or a credit or both, is written in the column for the proper year; black being used for additional credits to income and red for deductions from income. In some cases it may be more convenient to use separate columns for debit and credit for each year, although ordinarily the use of two colors of ink reduces the schedule to more manageable proportions. A study of this schedule shows that a mere transfer of income between years affects only the years from which and to which the income is transferred and has no effect upon the final net surplus nor upon the balance sheet. However, if additional expenses or income items are to be taken up in the accounts the balance sheet and final surplus will be affected accordingly. For illustration, if additional depreciation was to be provided for five years the amounts applicable to the years would be written (in red) in the respective columns and the total adjustment for depreciation would be carried into the "net balance of adjustment, debit" column. As this amount is a credit to the reserve for depreciation account in the balance sheet the amount must be written in the credit column under "balance sheet" (see explanation on Exhibit *21*). "Reserve for depreciation" would be written in the final explanation columns in order to indicate the balance sheet account affected by the adjustment. In the illustration given the net book income for each year for which an additional depreciation charge was made would be reduced by the amount of the annual charge, and the increase in the credit to the reserve for depreciation account would correspond to this reduction. Any type of adjustment would be entered and recorded in much the same way.

When all adjustments have been completed for the period of years under investigation all columns will be totaled and at the

foot of the schedule a summary will be prepared showing the book figures of surplus and income, the total of the adjustments and the adjusted figures. The difference between the total debits and credits for each year will indicate the net change to be made in the existing book figures of net income for the respective years and the sum of such differences for all years will agree with the net difference between the debit and credit columns under "net balances of adjustments", and will record the net increase or decrease in the aggregate income for the period under investigation. A debit, for illustration, to the income adjustment column for one year may have as its contra one of three things, namely, a credit to the income of another year, a credit to the surplus at the beginning of the period or a credit to an asset or liability account. In the first case the two items offset one another in the "Net Balances of Adjustments" columns; in the latter two cases the contra entries appear in the appropriate columns at the right side of the schedule. A credit would have just the opposite effect. (See explanation on Exhibit *21*, Appendix B).

Exhibit *22*, Appendix B, shows a slightly different form of income adjustment statement but similar in purpose to Exhibit *21* just discussed. In Exhibit *22* the book balance of surplus at the beginning and end of the investigation and the book net income for each period to be investigated are written on the first line of the schedule. This might also be done, if desired, in the case of Exhibit *21*. The detailed adjustments in the book figures would be entered in Exhibit *22* as are those in Exhibit *21*. Exhibit *22*, when all individual adjustments for the several years have been made, will show as final net figures the actual adjusted surplus or net income, whereas Exhibit *21* would show as final figures merely the changes to be made in the net surplus or net income for each year and for the total period investigated. Each schedule, as already stated, may be used to record any information which may be shown on the other—they merely show two slightly different, though common methods employed to adjust the book net income for a series of years.

All of these schedules (Exhibits *18* to *22*, inclusive, Appendix B) merely illustrate what may be done on an engagement by means of constructive thought on the part of the auditor, by determining in advance exactly what information is desired and by visualizing what results will be obtained when the information is scheduled in the proposed manner.

Supplemental Journal and Ledger

The supplemental journal and ledger are devices often used by an auditor in adjusting the accounts of a client so that they will agree with the amounts appearing in the balance sheet to be certified by the auditor. They are commonly employed, when the volume of adjustments makes them expedient, either with reference to an audit or in the case of an investigation extending over one or many accounting periods. The supplemental journal consists of loose sheets of working paper in journal form on which are entered with full explanations all adjustments or changes in the book figures of the client, which are necessary in order to adjust satisfactorily the book figures to actual conditions. The supplemental ledger will ordinarily have regular ledger ruling, though occasionally three columns of working paper may be used. In the latter case the first column would record the number of the supplemental journal entry; the other two columns would be used respectively for debit and credit amounts. Thus in form the supplemental journal would appear as follows:

SUPPLEMENTAL JOURNAL (DATE)

Journal entry No.	Details	Dr.	Cr.

The supplemental ledger would ordinarily appear with the regular ledger ruling. Occasionally, in case seven-column working paper is used, it may appear as follows:

SUPPLEMENTAL LEDGER

Account				Account		
Journal entry No.	Dr.	Cr.		Journal entry No.	Dr.	Cr.

As many journal entries may be made on a single page or as many ledger accounts may be placed, one below another, on a single working sheet as space will permit.

In general it may be said that these ledgers are extremely useful when many adjustments are necessary to bring about correct results, which adjustments the client does not for one reason or another desire to take up in the accounts, or when there are many subsidiary companies and adjustments in the accounts of one company affect the accounts of another. The supplemental journal entries are based upon the adjustments made for any account in the working schedules; the analysis and verification of the account is usually necessary to show what adjusting entries are needed. The general ledger account would be completely analyzed and then journal entries would be made to give effect to the adjustments.

When, however, the books of a client are well maintained and the auditor's adjustments are few in number, these supplemental records may be omitted; a sufficient record of the figures and adjustments may be made in the auditor's working schedules. It is always desirable that an auditor's adjustments be taken up in the accounts and the use of supplemental books by the auditor should be confined to those cases in which an unwillingness on the part of the client to take up the adjustments or great pressure in completing the work make such records imperative.

A Specific Illustration

Perhaps the best way to emphasize the value and need of the supplemental journal and ledger is to give a specific illustration. More than fifteen years ago an investigation was made of a large industrial company. The investigation covered the accounts for a period of years. There was a large number of subsidiary companies involved and the books of all companies while well maintained from an operating point of view were deficient in many ways with reference to the financial accounts and particularly in regard to the classification of assets and liabilities. The adjustments which were necessary, not only for the parent company but for the subsidiaries as well, involved—

(*A*) The reinstatement of capital expenditures treated as repairs and maintenance in the books of earlier years;

(*B*) The reversal of the company's provisions for depreciation

and the introduction of new provisions based upon sound principles;

(*C*) The reinstatement in the accounts of charges for certain equipment, in order to enable the auditor to determine correct profits and reasonable valuations for a financial balance sheet;

(*D*) A reclassification of the balance sheet accounts which had always been poorly grouped in the company's own books and financial statements;

(*E*) The elimination of charges to the several operating departments for interest and rent on owned property, the *offsets* for which had always been credited to the financial profit and loss accounts. This enabled the auditor to get back to the true charges for interest actually paid as between the company and the public exclusive of any intercompany transfers of charges;

(*F*) A restatement of the company's investments in affiliated companies and in marketable securities;

(*G*) The opening of separate accounts to define and differentiate the ordinary operating transactions and what might be termed financial or extraordinary transactions. By opening separate accounts for each of these classes of items it was comparatively easy for the auditor to make this division which is so important in preparing a financial balance sheet for certification; and

(*H*) The elimination from the books and periodical balance sheet of numerous items appearing on both sides of the published accounts and having their exact offsets on the other side of the prepared statements. By means of the supplemental ledger it was comparatively simple to make all these eliminations quickly, as both sides of the accounts could be dealt with in one operation.

Method of Procedure

The first step in taking up this work was to secure a copy of the company's consolidated balance sheet. This was analyzed into its component elements according to the different companies concerned. In this way a separate balance sheet was created for each company. In the preparation of the analysis the assets and liabilities were shown down the side of the working sheet and the names of the companies across the sheet in the several column headings. One sheet (similar to Exhibit *18*, Appendix B) thus showed a separate balance sheet for each company and, in addition, a consolidated balance sheet for all companies. The assets and liabilities as shown by the analysis sheet were next entered into accounts

in the first part of the supplemental ledger (*a*) according to the different companies and (*b*) according to the different subdivisions for each company. Thus, in starting with the "A" company, separate accounts were opened for properties, notes receivable, investments, cash, accounts payable, etc. This was followed by the same subdivision for the "B" company, the "C" company and the various other subsidiary enterprises.

The surplus account was analyzed so that the auditor might find the balance at the beginning of the period under consideration. This balance was carried in one account. The yearly profits from the beginning of the period to the date of examination were subdivided; one set of accounts was kept for *each* company and one account for *each* year, and the years were listed in separate columns on the same page. The surplus and the profit and loss accounts were segregated and kept in the back part of the supplemental ledger.

During the examination all current accounts between companies or between departments were ignored, as the auditor was interested only in the final consolidated figures and it was not necessary to prepare a balance sheet or statement of profit and loss for any separate company or department. The omission of these current accounts avoided a good deal of work and when an adjustment in the accounts of one company had its offset in the accounts of another one debit and one credit were sufficient to make the elimination which was necessary for preparing the final consolidated accounts.

Separate accounts were opened for purely financial or special profit and loss items such as interest paid, federal taxes, income from investments, bonuses received from communities for locating plants and for similar items. These accounts facilitated the proper grouping of the profit and loss items when the auditor was ready to prepare the final consolidated statement of earnings. After completing this analysis of the company's own consolidated accounts the amounts were entered in the supplemental ledger, as above indicated.

The next step was to prepare a trial balance in order to be certain that the ledger of the company was in balance at the beginning (per the books) and thus to save time which might be spent later in looking up differences. The supplemental books were then ready to receive the adjustments and the necessary entries were made during the progress of the work, the adjustments for each account

being prepared after the analysis and verification of the account had been completed. The adjustments were made in the form of journal entries, consecutively numbered and fully explained, and the entries were then posted to the supplemental ledger.

Incidently, in this first examination, made for the purpose of certifying the accounts of this company, the journal entries which were necessary in order to make all adjustments covered no less than 103 pages with 47 lines to each page. When the true character of an item differed from its title the method adopted was merely to make journal entry transfers between balance sheet accounts. In still other cases, when different kinds of items were included in a single account but all items were of the same general nature, supplemental journal entries were not prepared but notations were made in red ink in the supplemental ledger to show the composition of the account in order that the amounts might be properly classified when the balance sheet was prepared.

After the detail work was completed a tentative balance sheet and profit and loss account were prepared and a note was made in the supplemental journal to mark the last adjusting entry which was included in the tentative accounts. These constituted a record of what had been done to that point. Subsequently as a result of discussions with the officers of the client company, other adjustments were made and these were entered in the journal on subsequent pages headed "Adjustments after first draft balance sheet." They were then posted to the supplemental ledger accounts.

Benefits and Advantages

The immediate advantage from this work was a considerable saving of time in the final compilation and preparation of the consolidated accounts. This was possible because it was not necessary to peruse a mass of detail audit papers, as all really important information contained in the audit papers had been incorporated in the supplemental journal and ledger in a more convenient form. Later advantages were that the supplemental journals and ledgers prepared during this examination proved very useful when the company decided to take up in its accounts the major portion of the auditor's adjustments. During later years these records proved particularly valuable with reference to tax questions. It is still true that on really important questions running back a number of years the client company frequently obtains the facts from the

auditor's supplemental ledger rather than from its own financial books of account. The reason is that the record as compiled in the supplemental ledger is more trustworthy and affords much easier reference than the company's books for these earlier years.

The greatest advantage, however, is that examinations or investigations of this kind are usually made under great pressure, and the officers desire the final results at the earliest possible date. By the use of the supplemental ledger and journal the final result may be submitted within a few days after the last adjusting journal entry has been made. The preparation of a more detailed profit and loss statement requires somewhat more time, as it is necessary to apply each profit and loss adjustment to the profit and loss classification which it affects. Subdivision of the account classification is ordinarily not attempted in a supplemental ledger. As a rule, however, clients are more interested at the outset in the total profit figures. When the final result has been presented to them they are then prepared to allow sufficient time for details and refinements.

Additional Illustrations

Additional illustrations of the use of the supplemental ledger and journal or of similar records will emphasize their value to the auditor, particularly with regard to investigations made under pressure or in the preparation of final accounts where the clients' records have not been properly kept. A striking illustration of both is that of a large company which desired a hurried investigation of a business in South America in which it was interested. The auditor and assistants prepared at once to enter upon the work and arrived at the plant of the company barely a week before the figures were desired. According to the statute law of the country in which this company was situated all financial transactions, even including cash, had to be journalized before being posted into the ledgers of the company. The cash book had been kept up to date and journal vouchers had been prepared but approximately a year and a half had elapsed since any transactions had been journalized. Because of the large number of transactions it would have required weeks and perhaps months to have posted the books and prepared financial statements. However by the use of a ledger similar in form to the supplemental ledger the accounts were built up, the statements prepared and the results presented

to the client within the time desired. In this case the auditor built up the entire group of accounts, instead of merely supplementing the client's accounts with his own adjustments. Postings to the skeleton ledger accounts were made directly from the client's vouchers and other records.

In yet another case it was found necessary in the audit of the accounts to make use of the supplemental ledger and journal to agree the company's accounts with the figures which the auditor could properly certify. These adjustments were prepared in accordance with the methods described above; the numbered journal entries contained full explanations and the ledger accounts were prepared in skeleton form. The journal entries which were necessary to make all the adjustments in the accounts numbered 485, requiring 176 pages of working paper with 41 lines to the page. Many of these journal entries included 18 to 20 items, and all items were posted to ledger accounts. The ledger accounts required approximately 150 pages of seven-column working paper. The task of preparing these entries and entering them with detail explanations in the books of account would have entailed so much work and time that the final accounts could not possibly have been prepared and certified by the time when they were wanted. By the use of the supplemental books, however, the accounts were prepared and the auditor's certificate was given in time.

Conclusion

Such conditions as those described in this chapter tend to emphasize more strongly than ever that the auditor must primarily be mentally alert and capable of adjusting himself to and solving any extraordinary problem with which he may come into contact. The forms which have been presented and the methods which have been outlined may prove of the greatest service in the conduct of an audit or in other work which the auditor will perform, but no audit can be conducted by following mechanical rules or by the use of set forms or working schedules. At best these must be accepted by the auditor merely as a guide, outlining the procedure which should be adopted and the working schedules which should be prepared to record the information which he will require. This truth we have endeavored to emphasize throughout this volume, and it is perhaps not amiss, in closing, to quote the words of Sir William Plender: "The qualities which make for success in our

profession are by no means confined to the knowledge of hard facts on accountancy and legal matters. They cover a much wider field than this. In the forefront I would place fair-mindedness and common sense—qualities by no means so general as one would imagine. I would also include power of criticism, the sense of proportion, clearness in thought and expression, and an appreciation of the mental outlook of others."*

Well selected reading, free intercourse and friendly discussion with one's contemporaries and the wise choice of friends will best foster and develop these qualities.

* See ACCOUNTANTS' JOURNAL, June, 1921, p. 119.

BIBLIOGRAPHY

It is the purpose of this bibliography to provide for the student and reader a rather complete course of study on the general principles and procedure of a balance sheet audit, and, as well, a somewhat ample reading course on accounting and kindred subjects. The bibliography is divided into three parts, the first part dealing with the work of the audit, the second part treating not only of the broader aspects of auditing and accounting but of general business as well, while the third part is a special bibliography on no-par-value stock. It should be understood that the author, by including only certain references under each topic, does not intend thereby to recommend these references to the exclusion of all others. He has, however, attempted to draw upon material which is generally conceded to be of the best, and which sets forth clearly the essential principles to be learned.

PART I

Part I, which is the section on auditing procedure, has been arranged as topical assignments, and a number of references, in which accounting principles are also emphasized, has been given for each topic. The student should read sufficient of the references to master the essential points discussed, and should refer continually to the schedules and working forms shown in APPENDICES A and B. These topics and reading assignments are as follows:

Topic 1 — Introductory. The nature and extent of the public accountant's work; his qualifications and training.

References:

Dickinson, A. Lowes, *Duties and responsibilities of the public accountant. Accounting Practice and Procedure*, pp. 212–48.
Joplin, J. Porter, *Relationship of the professional public accountant to the world of commerce.* CANADIAN CHARTERED ACCOUNTANT, January, 1917, pp. 171–5.
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Topic 2 — The Audit Papers — content of; methods of indexing and filing, etc.
References:
Audit Working Papers, Chapters I and II, and Appendix A.
Bell, Wm. H., *Audit working papers.* JOURNAL OF ACCOUNTANCY, August, 1919, pp. 104–12.
Colley, F. G., *Working papers.* JOURNAL OF ACCOUNTANCY, July, 1916, pp. 43–9.
Montgomery, R. H., *Auditing Theory and Practice.* Third Ed., Vol. I, pp. 47–51.

Topic 3 — The Balance Sheet Audit — what it includes; its limitations. Beginning the audit.
References:
Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements,* pp. 3–7 and 23–5.
Dickinson, A. Lowes, *Accounting Practice and Procedure,* pp. 31–54.
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Topic 4 — Capital Assets. Cost of property — distinction between charges to *capital* and charges against *revenue;* verification of authorizations, expenditures, balances, etc.; form and content of schedules and working papers, etc.
References:
Distinguishing between charges to capital and charges against revenue:
Cole, W. M., *Accounts: Their Construction and Interpretation,* Chapter VII.
Kester, R. B., *Accounting Theory and Practice,* Vol. II, pp. 81–98.
Capital and revenue. JOURNAL OF ACCOUNTANCY, October, 1915, pp. 283–90.
Valuation of fixed assets — Principles of:
Hatfield, H. R., *Modern Accounting,* pp. 70–106.
Kester, R. B., *Accounting Theory and Practice,* Vol. II, pp. 258–338.
Esquerré, P.—J., *Applied Theory of Accounts,* pp. 221–60.
Auditing:
Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements,* pp. 14–5.
Dickinson, A. Lowes, *Accounting Practice and Procedure,* pp. 75–82.
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 173–94.
Reynolds and Thornton, *Duties of the Junior Accountant,* pp. 64–9.
Payroll audit: the duties of the auditor. JOURNAL OF ACCOUNTANCY, April, 1920, pp. 260–5.
Audit Working Papers, Chapter IV.
Important:
Turn to Appendix A, working schedules *A* to *A-6,* and study carefully the methods of verifying and scheduling cost of properties. See also exhibit *8,* Appendix B.

Topic 5 — Capital Assets (continued). Discussion of good-will, franchises, patent rights, etc.
References:
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 195–220.
Hatfield, H. R., *Valuation of good-will. Modern Accounting,* pp. 107–20.
Cole, W. M., *Fundamentals of Accounting,* pp. 367–72.

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Intangible values in balance sheets. Editorial, Journal of Accountancy, August, 1916, pp. 122–5.

Topic 6 — Investments, current and in subsidiary and/or affiliated companies. What is a subsidiary or an affiliated company; physical inspection of securities; certificates from depositaries; liens, cost v. market value, etc.; schedules and working papers.

References:

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements,* pp. 10–11.
Reynolds and Thornton, *Duties of the Junior Accountant,* pp. 53–7.
Dickinson, A. Lowes, *Accounting Practice and Procedure,* pp. 82–8, 116–8.
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How to investigate securities. Journal of Accountancy, May, 1907, pp. 23–32.
Audit Working Papers, Chapter V and Appendix A, schedules *B, C* and *G.*

Topic 7 — Inventories — importance of correct inventories for balance sheet and income statement purposes; methods of verification; schedules, working papers, prices, certificates of quantities, statement of work done, etc. Verification of work in progress, both where there is and where there is not a cost-finding system.

References:

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements,* pp. 11–4.
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Note: See *The Accountants' Index* for references on methods of taking inventories, operating permanent inventory records, etc.

Topic 8 — Accounts Receivable and Reserve for Bad Debts. Methods of verification, schedules and working papers, etc.

References:

Accounts Receivable:

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements,* pp. 9–10.
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 89–106.
Dickinson, A. Lowes, *Accounting Practice and Procedure,* pp. 114–6.
Kester, R. B., *Accounting Theory and Practice,* Vol. II, pp. 77, 215–9, and 560–2.

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Topic 9 — Notes Receivable, and Interest Prepaid or Accrued. Methods of verification, use of certificates, inspection of notes, etc. Verification of notes discounted. Schedules, etc., necessary for each.

References:

Notes Receivable:
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Montgomery, R. H., *Auditing Theory and Practice*, Third Ed., Vol. I, pp. 529–30, 531.
Hatfield, H. R., *Modern Accounting*, p. 97.
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Topic 10 — Cash and Petty Cash — procedure in counting cash and obtaining certificates; bank reconciliations, outstanding cheques, items in transit, signatures, approvals of petty cash vouchers, etc.; statement of work done; schedules, working papers, etc.

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See also exhibit *13*, Appendix B.

Topic 11 — Deferred Charges to Operations — prepaid interest, taxes prepaid, unexpired insurance, leases unexpired, etc.; verification of each; necessary schedules and content of working papers; whether proper balance sheet items; etc.

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Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements*, p. 16.
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Topic 12 — Capital Stock — kinds of capital stock; stock of no par value; treasury stock; etc. Verification, necessary certificates, schedules and working papers, etc.

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Topic 13 — Bond and Mortgage Indebtedness. Verification of each, necessary certificates, schedules and working papers, etc.

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Topic 14 — Notes and Accounts Payable. Authorizations, vouchers, certificates, schedules and working papers, etc.

References:

Notes Payable:

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Audit Working Papers, Chapter X and Appendix A, schedules *DD* to *DD-5*.

Topic 15 — Accrued and contingent liabilities, liabilities not taken up in the accounts, provision for Federal taxes, etc. Certificates from officers, schedules and working papers, etc.

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Accrued Liabilities:

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Reynolds and Thornton, *Duties of the Junior Accountant*, pp. 82–3.
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Kester, R. B., *Accounting Theory and Practice*, Vol. I, pp. 323–7; Vol. II, pp. 81, 344, 351–5.

Hatfield, H. R., *Modern Accounting*, pp. 32, 192.

Esquerré, P.—J., *Applied Theory of Accounts*, pp. 161–3, 373–4.

Federal Taxes, etc.:

Montgomery, R. H., *Auditing Theory and Practice*, Third Ed., Vol. I, pp. 239–41.

See also U. S. Treasury publications, *The Accountants' Index*, etc.

Topic 16 — Sundry Reserves and Funds. Reserves for Contingencies, Sinking Funds, etc. Pension and Sinking Funds, Special Funds with Trustees, etc. Sufficiency of provisions, verification of charges and balances; schedules, etc.

References:

Dickinson, A. Lowes, *Accounting Practice and Procedure*, pp. 39, 87–8, 108, 148–52, 153–60, 164–74.

Montgomery, R. H., *Auditing Theory and Practice*, Third Ed., Vol. I, pp. 214–20, 267–71, 282–89, 628–32.

Hatfield, H. R., *Modern Accounting*, pp. 233–60, 261–72 (particularly the latter assignment).

Dicksee, L. R., *Depreciation, Reserves, and Reserve Funds*, pp. 57–65.

Cole, W. M., *Accounts: Their Construction and Interpretation*, pp. 96–104, 110–5, 123–6, 139, 185–90.

Bennett, R. J., *Corporation Accounting*, pp. 279–304, 323–7.

Esquerré, P.—J., *Applied Theory of Accounts*, pp. 292–9, 340–1, 369–80.

Kester, R. B., *Accounting Theory and Practice*, Vol. II, pp. 410–24, 447–65.

Jackson, J. Hugh, *Treatment of redemption funds*. JOURNAL OF ACCOUNTANCY, June, 1922, pp. 417–30.

Sutherland, James B., *Reserves and sinking funds*. CANADIAN CHARTERED ACCOUNTANT, October, 1917, pp. 101–9.

Walton, Seymour, *Sinking funds and reserve accounts*. JOURNAL OF ACCOUNTANCY, October, 1908, pp. 394–9.

Audit Working Papers, Chapter XI, and exhibits *19* and *20*, Appendix B.

Note: For further references, see *The Accountants' Index* for numerous articles on Reserves and Sinking Funds.

See also, if possible, copies of Mortgage Deeds of Trust for specific reserve and sinking-fund provisions.

Topic 17 — Surplus — reconciliation of balance at beginning of period; procedure in case of first audit.

The Income Statement, its form and content. Verification of sales, returns, allowances, sales discounts, etc. Schedules, working papers, etc.

References:

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 21–2, 24.

Dickinson, A. Lowes, *Accounting Practice and Procedure*, pp. 55–74.

Montgomery, R. H., *Auditing Theory and Practice*, Third Ed., Vol. I, pp. 268, 278–89, 290–323.

Cole, W. M., *Accounts: Their Construction and Interpretation*, pp. 48–56, 90–1, 407–9.

Hatfield, H. R., *Modern Accounting*, pp. 195–232.

Kester, R. B., *Accounting Theory and Practice*, Vol. II, pp. 477–92.

Esquerré, P.—J., *Applied Theory of Accounts*, pp. 430–8.

Pixley, F. W., *Accounting*, Ed. II, pp. 162–201.
Classification and certification of profits. JOURNAL OF ACCOUNTANCY, April, 1916, pp. 255–60; ACCOUNTANT, May 13, 1916, pp. 564–5.
Audit Working Papers, Chapter XII, and Appendix A, schedules *JJ* to *JJ-6.*

Topic 18 — Cost of Sales — manufactured or purchased. Analysis of manufacturing expenses, inspection of requisitions, etc. Verification methods, schedules, etc.

References:

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements*, p. 22.
Dickinson, A. Lowes, *Accounting Practice and Procedure*, pp. 190–200, 208–11.
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 538–51.
Kester, R. B., *Accounting Theory and Practice,* Vol. I, pp. 38–50.
Payroll audit, the duties of the auditor. JOURNAL OF ACCOUNTANCY, April, 1920, pp. 260–5.
Repairs, renewals, and depreciation, and discrimination between capital and revenue expenditure. ACCOUNTANT, March 7, 1908, pp. 318–23.
Audit Working Papers, Chapters VI and XII. Also Appendix A, schedules *D* and *JJ* groups.
See also *Inventory* references.

Note: See *The Accountants' Index* for references on cost of manufacturing, purchasing, etc.

Topic 19 — Selling, Administrative, and General Expenses; miscellaneous incomes and special charges. Analysis and verification, schedules, etc.

References:

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 22–3.
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 324–34, 551–77.
Kester, R. B., *Accounting Theory and Practice,* Vol. II, pp. 343, 491.
Frazer, George E., *Pro-rating of distribution expense to sales orders.* JOURNAL OF ACCOUNTANCY, January, 1912, pp. 25–43.
Walton, Seymour, *Earnings and income.* JOURNAL OF ACCOUNTANCY, April, 1909, pp. 452–69.
Expense classification. JOURNAL OF ACCOUNTANCY, June, 1911, pp. 137–9.
Cox, H. C., *Classified C. P. A. Problems and Solutions,* pp. 17–8.
Audit Working Papers, Appendix A (study *JJ* group of schedules).

Topic 20 — The close of the audit. Examination of the accounting system and methods.

References:

Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 55–9, 62–70, 600–20.
Dicksee, L. R., *Modern accountancy methods in relation to business efficiency.* ACCOUNTANT, November 14, 1914, pp. 581–6.
Davies, B. C., *Business system, and internal check in relation to the audit.* ACCOUNTANT, May 15, 1915, pp. 648–52.
Cooley, Morgan L., *Close of an audit.* JOURNAL OF ACCOUNTANCY, May, 1909, pp. 33–9; ACCOUNTANT, July 17, 1909, pp. 96–8.
Some notes on the close of an audit. INCORPORATED ACCOUNTANTS' JOURNAL, October, 1914, pp. 19–21.

Topic 21 — The preparation of the report and of the certified statements.

References:

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements*, pp. 23–5.
Dickinson, A. Lowes, *Accounting Practice and Procedure,* pp. 236–40.

May, George O., *Qualifications in certificates.* JOURNAL OF ACCOUNTANCY, October, 1915, pp. 248–59; CANADIAN CHARTERED ACCOUNTANT, January, 1916, pp. 181–91.
Bell, Wm. H., *Accountants' Reports,* pp. 186–242.
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 352–76, 405–22.
Reynolds and Thornton, *Duties of the Junior Accountant,* pp. 73–8, 79–81, 83–7, 103–7.
Accountant's report from the standpoint of the several parties at interest. JOURNAL OF ACCOUNTANCY, August, 1915, pp. 91–103; CANADIAN CHARTERED ACCOUNTANT, January, 1916, pp. 199–212.
Importance of comments on reports. JOURNAL OF ACCOUNTANCY, May, 1913, pp. 391–3.
Audit Working Papers, Chapter III and Appendix A (final statements).
Note: If possible obtain copies of audit reports or of certified financial statements, and study them carefully.

Topic 22 — Consolidated Balance Sheets and Income Accounts.
References:
Dickinson, A. Lowes, *Accounting Practice and Procedure,* pp. 176–84.
Webster, G. R., *Consolidated accounts.* JOURNAL OF ACCOUNTANCY, October, 1919, pp. 258–72.
Walton, Seymour, *Consolidated statements.* JOURNAL OF ACCOUNTANCY, March-June, 1918, pp. 225–37, 303–20, 384–99, 460–76.
Bell, Wm. H., *Accountants' Reports,* pp. 143–67.
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 335–51.
Esquerré, P.—J., *Applied Theory of Accounts,* pp. 447–60.
Kester, R. B., *Accounting Theory and Practice,* Vol. II, pp. 600–19.
Finney, H. A., *Consolidated Statements* (entire volume). New York, Prentice-Hall, Inc., 1922, pp. 229.
Audit Working Papers, Appendix B, exhibit *18.*
Note: Obviously this topic is important enough in itself to require a large amount of time if it is to be done thoroughly, and the reader must use judgment as to the amount of time given to it.

Topic 23 — Investigations.
References:
Dickinson, A. Lowes, *Accounting Practice and Procedure,* pp. 213–30.
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 423–90.
Lisle, George, ENCYCLOPAEDIA OF ACCOUNTING, Vol. III, pp. 440–56.
Montgomery, Grenville D., *Investigations for financing purposes.* JOURNAL OF ACCOUNTANCY, December, 1913, pp. 417–23.
Audit Working Papers, Chapter XIII, and Appendix B, exhibits *21* and *22.*

Topic 24 — The Detailed Audit.
References:
Montgomery, R. H., *Auditing Theory and Practice,* Third Ed., Vol. I, pp. 491–599 (scan for important points).
Reynolds and Thornton. *Duties of the Junior Accountant* — review such sections as
Beginning the work, pp. 11–6.
Verification of bank balances, cash on hand, etc., pp. 17–31.
Checking footings, pp. 31–4.
Checking and testing postings, pp. 36–44.
Vouching entries, pp. 44–50.
Checking inventories, pp. 69–73.
Davie, P., *Detail instructions, etc., in complete audit.* ACCOUNTANT, October 3, 1914, pp. 375–81.

Topic 25 — Professional Ethics.

References:

American Institute of Accountants, *Year Book, 1920,* pp. 160–1.
Sterrett, J. E., *Professional ethics.* JOURNAL OF ACCOUNTANCY, October, 1907, pp. 407–31; ACCOUNTANT, November 16, 1907, pp. 618–28.
Joplin, J. Porter, *Ethics of accountancy.* JOURNAL OF ACCOUNTANCY, March, 1914, pp. 187–96.
Forbes, John F., *Some phases of professional ethics.* JOURNAL OF ACCOUNTANCY, October, 1915, pp. 271–5; ACCOUNTANT, November 6, 1915, pp. 569–71.
Reynolds and Thornton, *Duties of the Junior Accountant,* pp. 88–91.
Bunnell, A. K., *Standards of professional conduct and practice.* CANADIAN CHARTERED ACCOUNTANT, October, 1911, pp. 53–60.

Note: In addition to the above twenty-five topics, the reader who is interested may find numerous references in *The Accountants' Index* covering the audit of special lines of business. Typical of such audits are mining companies, banks, brokerage and investment houses, textile companies, steamship companies, moving picture companies, iron and steel companies, oil companies, insurance companies, automobile manufacturers and distributors, chain store companies, and others. Authors have prepared articles or entire books on single special audits or on groups of such audits; however, since different readers will be interested in different kinds of business, the topical readings are confined to general principles and practice. Each reader is urged to become familiar with *The Accountants' Index* — the book should be in every library — for thereby he will have made available to him the entire wealth of existing accounting literature.

PART II

This section is intended to provide a broad and general course of reading on all phases of accountancy and of business related thereto. The references include not only accounting and business law, but also English composition, mathematics, and generally recognized works on corporation finance and economics. The books suggested should form the basis of a good accounting library, and are as follows:

Accounting — Principles.

Cole, Wm. Morse, *Fundamentals of Accounting*. Boston, Houghton-Mifflin Co., 1921. Pp. 434.

Hatfield, Henry Rand, *Modern Accounting*. New York, D. Appleton & Co., 1920. Pp. 367.

Kester, Roy B., *Accounting Theory and Practice*, Vols. I, II, and III (especially Vol. II). New York, The Ronald Press Co., 1917, 1918, and 1921. Pp. 607, 796, and 718.

Esquerré, P.—J., *Applied Theory of Accounts*. New York, The Ronald Press Co., 1914. Pp. 575.

Sprague, Chas. Ezra, *Philosophy of Accounts*. Ed. 5. New York, The Ronald Press Co., 1922. Pp. 183.

Lisle, George, *Accounting in Theory and Practice*. Edinburgh, Wm. Green & Sons, 1900. Pp. 426.

Accounting — Procedure.

Dickinson, A. Lowes, *Accounting Practice and Procedure*. New York, The Ronald Press Co., 1917. Pp. 315.

Bell, Wm. H., *Accountants' Reports*. New York, The Ronald Press Company, 1921. Pp. 247.

Accounting — Corporation.

Bennett, R. J., *Corporation Accounting*. New York, The Ronald Press Co., 1917. Pp. 563.

Dickinson, A. Lowes, *Profits of a corporation*. (In CYCLOPÆDIA OF COMMERCE, ACCOUNTANCY, AND BUSINESS ADMINISTRATION, 1910. Vol. VI, pp. 255–97.)

Accounting — Cost.

Webner, Frank E., *Factory Costs*, pp. 611. (Out of print, but in most libraries.)

Nicholson, J. Lee and J. F. D. Rohrbach, *Cost Accounting*. New York, The Ronald Press Co., 1919. Pp. 576.

Church, A. Hamilton, *Manufacturing Costs and Accounts*. New York, McGraw-Hill Book Co., 1917. Pp. 452.

Note: Cost references to specific industries may be found in *The Accountants' Index*.

Auditing.

Federal Reserve Board, *Approved Methods for the Preparation of Balance Sheet Statements*. Washington, Government Printing Office, 1918. Pp. 25.

Montgomery, Robert H., *Auditing Theory and Practice*. Third Edition. Vols. I and II. New York, The Ronald Press Company, 1922. Pp. 730 and 559.

Reynolds, W. B., and F. W. Thornton, *Duties of the Junior Accountant.* New York, American Institute of Accountants, 1918. Pp. 102.

Jackson, J. Hugh, *Audit Working Papers.* New York, American Institute of Accountants, 1922.

Commercial Law.

Conyngton, Thomas, *Business Law; a Working Manual of Every Day Law.* New York, The Ronald Press Co., 1920. Pp. 870.

BOUVIER'S LAW DICTIONARY AND CONCISE ENCYCLOPÆDIA. Three volumes. Pp. 3504. (An excellent reference work for definitions of legal terms, and for short discussion thereof.)

Schaub, L. F. and N. Isaacs, *The Law in Business Problems.* New York, The MacMillan Company, 1921. Pp. 821. (A more advanced treatise.)

Owens, W. A., *Law Quizzer.* St. Paul, West Publishing Co., 1914. $4.00. (An excellent text for reviewing the law in preparation for examinations — for the Institute Examinations the examinee should review such sections as Negotiable Instruments, Contracts, Sales, Agency, Guaranty and Suretyship, Real and Personal Property, Bailments, Partnerships, Corporations, and Bankruptcy.)

Actuarial Science and Mathematics.

Finney, H. A., *Introduction to Actuarial Science.* New York, American Institute of Accountants, 1920. Pp. 101.

Inwood's Tables for Estates, Reversions, Annuities, Etc. London, Crosby, Lockwood & Son, 1920 (30th Edition). Pp. 320. (An excellent reference book, containing interest tables, sinking-fund tables, logarithms, etc.)

Sprague, Charles Ezra and L. L. Perrine, *The Accountancy of Investment.* New York, The Ronald Press Co., 1914. Pp. 371.

Income Taxation.

The Revenue Act of 1921.*

*See also the previous revenue acts, and the regulations, etc., appertaining thereto.

Regulations 62, under the Revenue Act of 1921, Bureau of Internal Revenue. Washington, Government Printing Office.

U. S. Treasury Department, Bureau of Internal Revenue, *Cumulative Bulletin,* Nos. 1, 2, 3, 4, etc. Washington, Government Printing Office.

U. S. Treasury Department, *Treasury Decisions.* Washington, Government Printing Office.

Corporation Trust Company, Service for Current Year (see also the services for prior years).

Montgomery, R. H., *Income Tax Procedure of 1922.* New York, The Ronald Press Co., 1922. Pp. 1750.

Barton, Walter E. and Carroll W. Browning, *Federal Income Tax Laws Correlated and Annotated.* New York, John Byrne & Co., 1922. Pp. 450.

Columbia University Lectures, *The Federal Income Tax.* New York, Columbia University Press, 1921. Pp. 271.

Holmes, George E., *Federal Income Tax.* 1922 Edition. Indianapolis, The Bobbs-Merrill Co., 1922. Pp. 1508.

Stamp, Sir Josiah, *The Principles of Taxation.* London, MacMillan & Co., Ltd., 1921. Pp. 201.

Seligman, E. R. A., *The Income Tax.* New York, The MacMillan Co., 1914. Pp. 743.

Problems and Examination Questions.

American Institute of Accountants, *Examination Questions* (June, 1917, to May, 1921, inclusive). New York, American Institute of Accountants, 1921. Pp. 204.

JOURNAL OF ACCOUNTANCY, Students' Department (for solutions to the Institute examination questions).

C. P. A. Problems and Solutions, 1914, Vols. I and II. New York, The Ronald Press Company, 1915. Pp. 346 and 375.

Cox, H. C., *Classified C. P. A. Problems and Solutions, 1915.* New York, The Ronald Press Co., 1916. Pp. 414.

Foreign Exchange.

Escher, Franklin, *Foreign Exchange Explained; a Practical Treatment on the Subject for the Banker, the Business Man and the Student.* New York, The MacMillan Company, 1917. Pp. 291.

Goschen, Right Hon. Viscount, *Theory of Foreign Exchange.* London, Effingham Wilson, 1908. Pp. 152.

Dicksee, L. R., *Advanced Accounting,* pp. 34–40. London, Gee & Co., 1916. Pp. 571.

Kester, Roy B., *Accounting Theory and Practice,* Vol. II, pp. 542–555.

Office Organization and Practice.

Galloway, Lee, *Office Management, Its Principles and Practice.* New York, The Ronald Press Company, 1918. Pp. 701.

Hudders, E. R., *Indexing and Filing; a Manual of Standard Practice.* New York, The Ronald Press Co., 1916. Pp. 292.

Leffingwell, W. H., *Scientific Office Management.* Chicago, A. W. Shaw Company, 1917. Pp. 253.

Business English.

The *Dictionary.*

Wooley, E. C., *Handbook of Composition; a Compendium Regarding Good English Grammar, Sentence Structure, etc.* New York, D. C. Heath & Co., 1920.

Manley, John M., *Manual of English.* Chicago, Frederick J. Drake & Co., 1920.

Economics, Finance and General Business.

Taussig, F. W., *Principles of Economics.* Third Edition Revised. Two volumes. New York, The MacMillan Company, 1920–21. (Probably the best general American treatise on the subject.)

Smith, Adam, *The Wealth of Nations.* Numerous editions and publishers. (The beginning of modern economics, and a book that should be read by everyone.)

Ripley, William Z., *Railroads, Finance and Organization.* New York, Longmans, Green & Co., 1920. Pp. 638.

Haney, Louis H., *Business Organization and Combination.* New York, The MacMillan Company, 1916. Pp. 523.

Dewing, A. S., *Financial Policy of Corporations.* Five volumes. New York, The Ronald Press Co., 1920. Pp. 866.

Vol. I — *Corporate Securities.*
Vol. II — *Promotion.*
Vol. III — *Administration of income.*
Vol. IV — *Expansion.*
Vol. V — *Failure and reorganization.*

Conyngton, Thomas, R. J. Bennett, and P. W. Pinkerton, *Corporation Procedure.* New York, The Ronald Press Co., 1922. Pp. 1815.

Kniffen, W. H., *The Practical Work of a Bank.* Fifth Edition Revised. New York, Bankers' Publishing Co., 1919. Pp. 640.

Kirkbride, F. B. and J. E. Sterrett, *Modern Trust Company.* New York, The MacMillan Company, 1920. Pp. 549.

Shaw, A. W., *An Approach to Business Problems.* Cambridge, Harvard University Press, 1916. Pp. 332.

Nystrom, P. H., *Economics of Retailing.* New York, The Ronald Press Co., 1917. Pp. 407.

Twyford, H. B., *Purchasing; Its Economic Aspects and Proper Methods.* New York, D. Van Nostrand & Co., 1915. Pp. 252.

Whitten, R. H., *Valuation of Public Service Corporations.* Two volumes. New York, Banks Law Publishing Co., 1914. Pp. 1500.

Foster, H. A., *Engineering Valuation of Public Utilities and Factories.* Ed. 2. New York, D. Van Nostrand Co., 1922. Pp. 345.

Secrist, H., *Introduction to Statistical Methods.* New York, The MacMillan Co., 1917. Pp. 482.

Taylor, Frederick W., *Principles of Scientific Management.* New York, Harper & Bros., 1917. Pp. 144.

Jones, E. D., *Administration of Industrial Enterprises.* New York, Longmans, Green & Co., 1917. Pp. 442.

Thompson, C. B., *Scientific Management.* Cambridge, Harvard University Press, 1919. Pp. 818.

Brinton, W. C., *Graphic Methods for Presenting Facts.* New York, Engineering Magazine Company, 1914. Pp. 371.

Gowin, Enoch B., *Developing Executive Ability.* New York, The Ronald Press Co., 1920. Pp. 342.

Note: The above list is not complete, but is intended merely to suggest one or more well recognized books on each of the several subjects. It would be impossible, as only a casual glance through *The Accountants' Index* will convince anyone, to read everything that has been written on any of these subjects, but if a special study is to be made of any subject, *The Accountants' Index* or other source of reference should be used.

The Accountants' Index may be obtained from The American Institute of Accountants, 135 Cedar Street, New York. Pp. 1578. Price $15.00.

PART III

Part III of the bibliography has been prepared because of the rapid increase during recent years of the number of corporations issuing capital stock of no par value. This form of financing has become correspondingly important to the public accountant, and he should understand not only the accounting aspects of the subject, but also its legal and economic aspects. The references, subdivided as between books and pamphlets and magazine articles, are as follows:

Special References on No-par-value Stock:

Books and Pamphlets:

Bonbright, James C., *Shares of stock without par value. Railroad Capitalization; a Study of the Principles of Regulation of Railroad Securities.* New York, Columbia University Press, 1920. Pp. 100–31.

Largely a restatement from the works of other writers, but a good summary of the history, advantages and disadvantages of no-par-value stock.

Conyngton, Hugh R., *Financing an Enterprise.* New York, The Ronald Press Co., 1921. Vol. 2, pp. 385–400.

Historical summary, the advantages and disadvantages, of no-par-value capitalization.

Cooper, F., *Financing an Enterprise.* New York, The Ronald Press Co., 1915. Chapters XVI and XVII.

Comprehensive discussion.

Corporation Trust Company (New York), *Shares Without Par Value; Synopses of State Laws Authorizing Their Issue.* November 15, 1921. Pp. 20.

Corporation Trust System (The), *Business Corporations Under the Laws of Delaware; Shares With or Without Par Value; Advantages of the Delaware Law, Statutory Requirements, Forms.* 1919. Pp. 32.

Corporation Trust Company (Delaware), *Circular on Non-par Value Stock.* June 15, 1921.

Davis, John P., *Corporations, Their Origin and Development.* New York, G. P. Putnam's Sons, 1905. Pp. 114.

Davis, J. S., *Essays on the Early History of American Corporations.* Cambridge, Harvard University Press, 1917. Pp. 160, 251, 277.

Dewing, Arthur Stone, *Financial Policy of Corporations.* New York, The Ronald Press Co., 1920. Vol. 1, pp. 13–6.

A brief comment upon the provisions in various state laws, with examples of companies incorporated under such laws.

Haskins and Sells, *Capital stock without par value from an accounting point of view.* Reprinted from Haskins & Sells *Bulletin.* New York, 1922. Pp. 20.

Ignatius, M. B., *Financing of Public Service Corporations.* New York, The Ronald Press Co., 1918. Pp. 76, 78–83.

Par value in relation to actual value. "Even though the omission of par value will not accomplish the end expected, it will make easier the introduction of other remedies."

Jordan, David F., *Investments.* New York, Prentice-Hall, Inc., 1920. Pp. 12–3.

Kester, R. B., *Accounting Theory and Practice.* New York, The Ronald Press Co., 1918. Vol. 2, pp. 9–10, 20.

Kuhn, Arthur K., *A Comparative Study of the Law of Corporations.* New York, Longmans, Green & Co., 1912. Pp. 115.

Lovett, R. S., Testimony before the "Newlands Committee." Hearings before the Joint Committee on Interstate and Foreign Commerce. Pursuant to Public J. Res. 25. Washington, 1916–1918. Pp. 686, 707.

Lyon, W. H., *Capitalization, a Book on Corporation Finance.* Boston, Houghton-Mifflin Co., 1912. Pp. 84, 104, 170.
Brief defense.

National Association of Railway Commissioners. Proceedings, 1913, pp. 197–198; 1916, pp. 241 *et seq.*

New York State Bar Association. Annual reports, 1892, pp. 137 *et seq;* 1909, pp. 270–280; 1910, pp. 517–519; 1911, pp. 54–80; 1912, pp. 132–148.
Discussion, by well-known authorities, of the advantages and disadvantages of no-par-value stock.

Railroad Securities Commission. Report. November 1, 1911. *Ibid.* in Slason. Thompson's Railway Library, 1912. Chicago, Gunthrop-Warren Printing Co., 1913. Pp. 76–101.
Contains a discussion of par value and of actual value. Frequently quoted. (The following were appointed members of the Commission by President Taft: Messrs. Hadley, Judson, Strauss, Fisher and Moyer.)

Ripley, W. Z., *Railroads, Finance and Organization.* New York, Longmans, Green & Co., 1915. Pp. 90–6.
Vigorous opposition with respect to railways. Citation of Cincinnati, Columbus and Hocking Valley Railroad case.

Ripley, W. Z., *Railroads, Rates and Regulation.* New York, Longmans, Green & Co., 1912. Pp. 575.

Shepard, Edward M., Annual address before the New Hampshire Bar Association. *Proceedings,* vol. 2, Old Series, 1906. Pp. 273–97.

Shepard, Edward M., *Corporate capitalization and public morals.* Address before the Illinois Bar Association. *Proceedings,* 1907. Pt. 2, pp. 29–60.
Further amplification of the idea of substitution of non-par-value shares having a money valuation.

Stetson, F. L., *Testimony before the United States Industrial Commission. Report,* vol. 1, 1900, p. 976.

Walker, W. H., *Corporation Finance.* New York, Alexander Hamilton Institute, 1917. Pp. 45.

White, Frank, *On New York Corporations.* New York, Baker, Voorhis & Co., 1915. Pp. 367–73.

Magazines:

Adams, John, Jr., *Stocks and their features, a division and classification.* ANNALS OF AMER. ACAD. OF POL. AND SOC. SCIENCE, vol. 35, 1910, pp. 526–7.

Allen, James A., *Non-par stock.* CENTRAL LAW JOURNAL, March 5, 1920, vol. 90, pp. 170–7; Kansas Bar Association, 1920, pp. 118–27.
For comments by John A. Chambliss upon this article, see the CENTRAL LAW JOURNAL, November 5, 1920, vol. 91, pp. 333–4.

Clay, Buckner, *The West Virginia law permitting corporations to issue stock without par value.* WEST VIRGINIA LAW QUARTERLY, January, 1921, vol. 37, pp. 113–8.

Comment upon the absence of no-par-value provisions in the British Company Law. THE ACCOUNTANT, June 25, 1921, p. 828.

Cook, William W., *Stock without par value; consideration of this new device of corporate financing; of the dangers it may involve and of additional steps needed to protect creditors and purchasers.* JOURNAL OF THE AMERICAN BAR ASSOCIATION, October, 1921, pp. 534–7. Same — reprinted.
A decided opposition.

Cook, William W., *"Watered stock" — Commissions — "Blue Sky Laws" — Stock without par value.* MICHIGAN LAW REVIEW, vol. 19, No. 6. Same—reprinted.
With citation of cases.

Cotton, H. E., *Par-value versus no par value stock.* AMERICAN BAR ASSOCIATION JOURNAL, vol. 7, December, 1921, pp. 671–3.

Delaware corporations doing business in Kansas. MICHIGAN LAW REVIEW, vol. 19, 1919, p. 316.
North American Pet. Co. v. Hopkins (Kan.), 181. Pac. 625. New York and Ohio agree by statute with the Kansas court that the aggregate assets employed by the corporation seems the most reasonable basis for taxation purposes.

Dwight, Frederick, *Par value stock.* YALE LAW JOURNAL, vol. 16, 1907, pp. 247–52.

Gerstenberg, Charles W., *Stock without par value.* 100% MANAGEMENT, February, 1922, pp. 60–4.

A general criticism of Mr. Cook's article, with comment upon the New York law.

Grossman, Isador, *Corporate organizations, especially under the Ohio non-par stock Act.* OHIO LAW BULLETIN, vol. 65, December 13, 1920, pp. 494–501.

Grossman, Isador, *Corporate organizations with special reference to the Ohio non-par stock Act.* OHIO LAW REPORTER, vol. 18, Dec. 13–20, 1920, pp. 269–84, 288–304.

Harno, A. J. and Rice, R. F., *Non-par value stock.* AMERICAN LAW REVIEW, May-June, 1922, pp. 321–44.

Harno, A. J. and Rice, R. F., *Shares with no par value.* MINNESOTA LAW REVIEW, June, 1921, pp. 493–514; ILLINOIS LAW BULLETIN, vol. 3, February, 1921, pp. 71–89.

Contains a complete history of the early attempts to secure the passage of the New York law, with citation of cases.

Hollen, R. H. and Tuthill, R. S., *Uses of stock having no par value.* AMERICAN BAR ASSOCIATION JOURNAL, vol. 7, November, 1921, pp. 579–82.

Hugo, F. M., *Corporations in New York.* BENCH AND BAR, January, 1920, pp. 10–9; *Report of the New York State Bar Association,* vol. 43, 1920, pp. 482–502.

Discusses the imperfections of the law as it was enacted in 1912.

Hurdman, F. H., *Capital stock of no par value.* JOURNAL OF ACCOUNTANCY, October, 1919, pp. 248–57.

The accounting aspect with a chart of the provisions of all laws in effect in 1919.

Keister, Albert S., *Recent tendencies in corporation finance.* JOURNAL OF POLITICAL ECONOMY, April, 1922, pp. 257–73.

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A one-page comment on Wall Street "novelties" with a lengthy quotation from the Railroad Securities Commission Report.

Morawetz, V., *Shares without nominal or par value.* HARVARD LAW REVIEW, June, 1913, pp. 729–31.

Brief and general in treatment.

No par value stock, valuation for franchise fee purposes. (Detroit Mortgage Corporation v. Vaughan, Secretary of State. (Mich.) 178 N. W. 697) 19 MICHIGAN LAW REVIEW, November, 1920, pp. 95–6.

Pou, James H., *Shares of stock without par value.* NORTH CAROLINA REVIEW, June, 1922, pp. 26–30.

Report of the Committee on a Uniform Incorporation Act to the thirtieth annual meeting of the National Conference of Commissioners on Uniform State Laws, August, 1920, pp. 6–7.

Shaffer, F. H., *Organization of companies under the non-par value stock act.* AMERICAN LAW REVIEW, vol. 55, May, 1921, pp. 438–45; OHIO LAW BULLETIN, vol. 66, May 9, 1921, pp. 70–6.

Shares without par value (current legislation). COLUMBIA LAW REVIEW, vol. 21, March, 1921, pp. 278–80.

Historical — United States, Canada and Europe, with citation of cases.

Stock without par value. JOURNAL OF ACCOUNTANCY, November, 1919, pp. 385–94.

Stocks without par value. The Wisconsin Edison Company, Inc., was the first large company to be incorporated under the new law of the State of New York. CORPORATION TRUST COMPANY JOURNAL, 1912, No. 35.

Wickersham, George. *The capital of a corporation.* HARVARD LAW REVIEW, vol. 22, March, 1909, pp. 319–38.

INDEX

Note: This Index includes not only references to the material in the preceding pages of the book, but also refers to the schedules and exhibits in APPENDICES A and B respectively. All references to the two appendices are in italics; the schedules in APPENDIX A are numbered by letters and figures combined, thus, *D-6*, or *GG*, while the exhibits in APPENDIX B are referred to by Arabic numerals only, as *1*, *7*, *22*. References to schedules and exhibits follow page references to text.

A

For reference key see note page 187.

J

L

For reference key see note page 187.

R

S

T

U

V

W

APPENDIX A

The following photographed schedules are typical of the working papers of a recurring balance sheet audit of an industrial concern. Any one of a number of industries might have been used for the illustration, and the verification of the accounts shown would be similar for each, except as relating to the technical processes involved in valuing the work-in-progress inventories and in determining the costs of and returns from product sold.

The business chosen for illustrative purposes is that of a manufacturing shipyard. Several ships were in process of construction at the beginning of the audit period (January 1, 1922), additional construction was done during the period, and certain ships were in process of construction at the close of the period (December 31, 1922). It is assumed (although the detail figures are not shown for this assumption) that work on war vessels for the United States Navy was discontinued, following the Armament Conference, shortly after the beginning of the year and that these construction orders merely await final settlement with the Government. Therefore, only a comparatively small amount of additional construction work was done on these orders during the year.

Vessel repairs and tug service, together with the sale of vessel small parts and the disposal of obsolete and surplus materials, composed the remaining merchandise transactions.

The illustrative verification of capital expenditures and of the most of the other items and amounts appearing in the Balance Sheet is similar to that which would be employed in the case of any other industrial organization. As already stated the verification of inventories and perhaps of some of the other items shown will vary in different industries, and also in different concerns within the same industry. The additional work which would be done for a first balance sheet audit, or on a detailed audit, is not illustrated; this procedure has been briefly discussed. Any variations in the working schedules which these different conditions make necessary are more a matter of detail than of principle and

will be determined largely by the data available on the specific engagement.

While the various supporting exhibits will not entirely coincide for any two audits the general content and arrangement of audit working papers are the same — it is that general scheme which is illustrated here. The reader should observe that each item in the balance sheet is supported by a leading schedule, and that each leading schedule is then supported by as many subsidiary schedules as are necessary to verify the item to the satisfaction of the principal who is to certify to the work. The subsidiary or supporting schedules should verify the item so thoroughly that no question remains concerning its accuracy. All information that would appear on the schedules in the ordinary course of a recurring balance sheet audit is shown on the schedules *in writing;* in addition, special points of importance or of interest are brought to the attention of the reader *as appended typewritten notes.* All transactions and figures are assumed.

In a few cases it may appear that there have been violations of correct accounting theory, but business expediency sometimes permits such procedure when approximately correct results are obtained. *Good* accounting is the servant of the business, and accounting should never exist as "art for art's sake." Likewise, the reader should realize that *the balance sheet is the balance sheet of the client,* and that ordinarily no changes will be made in the financial statements because of comparatively small errors which are found during the course of the audit. At best the balance sheet of a manufacturing or trading concern, in the words of Sir Arthur Lowes Dickinson, can only be "an approximation to facts, the degree of approximation depending upon the skill and accuracy with which the estimates are made" (*Accounting Practice and Procedure,* p. 32).

Of the several methods of cross-indexing described in Chapter II, it is probable that the method illustrated in this Appendix is the one most often and most satisfactorily used. The forms of schedules shown are also those ordinarily used in a balance sheet audit, although, as shown in Appendix B, other schedules may be used to record the same or similar information. Too great an attempt should not be made to use standard forms of schedules for the sources of information and the data to be obtained on audit engagements are seldom, if ever, the same. Auditing is

largely a matter of applying common sense to existing business facts and conditions, and therefore the successful utilization of absolutely standardized forms of audit schedules is impossible.

IMPORTANT! The cross-index references are ordinarily written in red ink or in red pencil, for this makes them more easily seen. "Contra" figures in the various schedules are also written in red. Because it is not possible to show these figures in red in photographing, all cross-index references and all contra or other figures which would normally appear in red ink *are encircled.* If the reader will remember this he may readily visualize just how the set of working papers would appear in practice — it being remembered that in bulk the actual papers would be several or many times this size.

SPIKE

Dec. 31, 1922.

The North American Shipbuilding Company

Annual Audit

December 31, 1922.

The North American Shipbuilding Company.

Balance Sheet

Dec. 31, 1921.	Assets	December 31, 1922.	
	Capital Assets:		
	A Property and Plant:		
774299795	Balance, December 31, 1921	799399656	
25099861	Additions during year	48256984	
799399656		847656640	
161495717	GG Deduct: Reserve for Depreciation	196760680	
637903939			650895960
7596598	B Special Funds with Trustees		7809413
4480000	C Investments in Associated Companies at book value – pledged as collateral for secured debt (contra)		90567500
	Current Assets:		
	D Inventories:		
152129610	Raw materials and supplies on hand and in transit	59704111	
120180493	Worked materials and contracts in progress less bills rendered on account	81946019	
272310103		141650130	
294806185	E Accounts Receivable, Less Reserve FF	109007835	
2188607	F Notes Receivable	865662	
— 0 —	G Marketable Securities – Liberty Bonds	9045550	
50898410	H Cash in Banks and on Hand	63922526	
620203305			324491703
27165648	J Deferred Charges to Operations		5222780
1297349490			1078987356

Dec. 31, 1921.	Liabilities.	December 31, 1922.		
	Capital Liabilities:			
	AA Capital Stock:			
10 000 000 00	Authorized – 100,000 shares of $100.00 each		10 000 000 00	
5 227 500 00	Issued and Outstanding – 52,275 shares			5 227 500 00
175800000	BB Funded and Secured Debt:			
	Authorized and Issued		300000000	
	Less: In Treasury BB'	400000		
	In Sinking Fund BB'	6110000 0	6150000 0	238500000
	Current Liabilities:			
— 0 —	CC Notes Payable		25000000	
360116305	DD Accounts Payable including accruals, pay-rolls, etc.		123600118	
— 0 —	EE Bond Interest Accrued		1344637	
360116305				149944755
	Sundry Reserves:			
33058916	HH Reserve for Contingencies			36272701
205624269	JJ Surplus – per Exhibit			131519900
1297349490				1078987356

We have examined the books and accounts of The North American Shipbuilding Company for the year ended December 31, 1922, and find that the above balance sheet at that date and the accompanying relative profit and loss account are correctly prepared therefrom.

During the year only actual additions have been charged to property account, and the provision for depreciation is, in our opinion, fair and reasonable.

The inventories of stocks on hand, as certified by responsible officials, have been valued at prices not in excess of cost or market, and the accounts and bills receivable are, in our opinion, good and collectible. Full provision has been made for all ascertainable liabilities, and we verified the cash and securities by actual inspection or by certificate from the depositaries. Balance sheets of the associated companies, as prepared by independent accountants, were inspected by us.

The deferred charges represent expenditures reasonably and properly carried forward to the operations of subsequent years.

We certify that, in our opinion, the above balance sheet is properly drawn up so as to show the financial position of the Company on December 31, 1922, and the accompanying relative profit and loss account fairly states the results for the fiscal year ended at that date.

The North American Shipbuilding Company.

Balance Sheet (second form).

Dec. 31, 1921.	Assets:			December 31, 1922.
	Current Assets:			
50898410	Cash in Banks and on Hand		63922526	
— o —	Marketable Securities - Liberty Bonds		9045550	
2188607	Notes Receivable		865662	
294806185	Accounts Receivable, less Reserve		109007835	
	Inventories:			
152129610	Raw materials and supplies on hand and in transit	59704111		
120180493	Worked materials and contracts in progress less bills rendered on account	81946019	141650130	
620203305	Total Current Assets			324491703
4480000	**Investments** in Associated Companies at book value - pledged as collateral for secured debt (contra)			90567500
7596598	**Special Funds** with Trustees			7809413
	Property and Plant:			
774299795	Balance, December 31, 1921		799399656	
25099861	Net Additions during year		48256984	
799399656			847656640	
161495717	Deduct: Reserve for Depreciation		196760680	
637903739				650895960
27165648	**Deferred Charges** to Operations			5222780
1297349490				1078987356

Dec. 31, 1921.	Liabilities.			December 31, 1922.
	Current Liabilities:			
— o —	Notes Payable		25000000	
360116305	Accounts Payable, including accruals, pay-rolls, etc.		123600118	
— o —	Bond Interest Accrued		1344637	
360116305	Total Current Liabilities			149944755
	Funded and Secured Debt:			
225000000	Authorized and Issued		300000000	
400000	Less: In Treasury	400000		
48800000	In Sinking Fund	61100000	61500000	
175800000				238500000
535916305	Total Liabilities			388444755
	Sundry Reserves:			
33058916	Reserve for Contingencies			36272701
568975221	Total Liabilities and Reserves			424717456
	Capital and Surplus:			
	Capital Stock: (Authorized - 100,000 shares of \$100.00 each - \$10,000,000.00) Issued and Outstanding -			
522750000	52,275 shares		522750000	
205624269	Surplus - per Exhibit		131519900	
728374269				654269900
1297349490				1078987356

Note to Reader ---- The first balance sheet shown is the form used for the most part by the large corporations of the country. Usage has made it the accepted form of balance sheet. This second form, however, is increasing in favor for credit purposes, and with the growing importance of capital stock of no par value it is somewhat convenient to combine all proprietorship items under "Net Worth", or under a similar heading. It is also interesting to observe that a number of large companies arrange the asset side of their balance sheets similarly to the first balance sheet shown, whereas the liability side of their balance sheets, except that Funded and Secured Debt is placed before Current Liabilities, is arranged very much like the form shown above. Any form of balance sheet which sets forth with reasonable clearness the financial condition of a company should be accepted by the auditor.

The North American Shipbuilding Company.

Summary of Surplus and of Profit & Loss for Year ending Dec. 31, 1922.

Profit and Loss

Gross Sales and Billings, less Returns, Allowances, Discounts, and Outward Freight	JJ1	113611691	
Less: Manufacturing Cost and Operating Expenses, including depreciation of manufacturing plant	JJ1	10436342 91	
Gross Profit			924774 00
Less: Admin., Selling and General Expenses	JJ5	906523 52	
Taxes	JJ5	165196 00	1071719 52
Operating Loss			146945 52
Deduct: Non-Operating Income:			
Interest and Dividends	JJ1	6402582	
Miscellaneous	JJ1	871155	7273737
			7420815
Add: Interest Charges:			
Bond Interest	JJ5	11328637	
Bond Discount (proportion for Year)	JJ5	10000 00	
Interest on Notes Payable	JJ5	1642049	13970686
Net Loss for Year ending Dec. 31, 1922			21391501

Surplus Account

Surplus, Dec. 31, 1921, per Auditor's working papers			205624269
Deduct: Net Loss for Year, as above		21391501	
Special appropriation - Reserve for Contingencies	HH	3750000	
Dividends - 8% on % Capital Stock	JJ	41820000	
Unamortized Bond Discount written off	J	7142868	74104369
Surplus, Dec. 31, 1922, per Balance Sheet			131519900

— JHJ.

(TO B/S.)

The North American Shipbuilding Company.

Changes in Financial Position — Dec. 31, 1922.

	Balance December 31, 1921.	Balance December 31, 1922.	Increase in liabilities or decrease in assets.
Resources provided as follows:			
Liquidation of current assets:			
Raw materials and supplies	152129610	59704111	92425499
Work in progress	120180493	81946019	38234474
Accounts and Notes Receivable	296994792	109873497	187121295
Liberty Bonds	—	9045550	9045550
Cash in Banks and on Hand	50898410	63922526	13024116
	620203305	324491703	295711602
Decrease in Deferred Charges	27165648	5222780	21942868
Increase in Funded Debt	175800000	238500000	62700000
Increase in Notes Payable	—	25000000	25000000
Increase in Sundry Reserves	33058916	36272701	3213785
Total			408568255

Applied as follows:

Net Loss for Year ending Dec. 31, 1922		21391501	
Dividends declared and paid		41820000	
Special appropriation for Contingencies		3750000	
Writing off Unamortized Bond Discount		7142868	
Increase in Property & Plant		12992021	
Increase in Property & Plant	48256984		
Less: Increase in Reserve for Deprec.	35264963		
Increase in Investments in Assoc. Companies		86087500	
" " Special Funds with Trustees		212815	
Decrease in Accounts Payable, etc.		235171550	
Total			408568255

— J.H.J.

Note to Reader ---- This schedule shows summarily the major changes in the financial position of the Company for the year under audit. Such comparison is very helpful both to the auditor and to the client, and a similar schedule should ordinarily be prepared in conjunction with each audit. See Appendix B, exhibit 6.

The North American Shipbuilding Company

T.B.

Working Trial Balance

Dec. 31, 1922

General Ledger

Final Trial Balance December 31, 1921	Account	December 31, 1922 before book adjustments Dr.	December 31, 1922 before book adjustments Cr.	Folio	Adjustments taken up in the books Dr.	Adjustments taken up in the books Cr.	Profit and Loss	Profit and Loss	Assets and Liabilities	Assets and Liabilities	
	Property and Plant	847656640		A					847656640		
	Funds in hands of Trustees	7809413		B					7809413		
	Investments (Permanent)	90567500		C					90567500		
	Accounts Receivable	111149528		E		(3) 109075			111040453		
	Notes Receivable	865662		F					865662		
	Petty Cash	100000		H					100000		
	Cash in Bank	63766140		H	(6) 66264	(7) 9878			63822526		
	Sundry Marketable Securities	9045550		G					9045550		
	Raw Materials and Supplies	59704111		D					59704111		
	Work in Progress	81946019		D					81946019		
	Accrued Interest – Notes Rec.			E	(1) 82972				82972		
	Insurance Prepaid	5222780		J					5222780		
	Bond Discount Unamortized	7142868		J		(5) 7142868					
	Capital Stock Authorized		1000000000	AA						1000000000	
	Capital Stock Unissued	477250000		AA					477250000		
	Collateral Trust 5½% Gold Notes		75000000	BB						75000000	
	First Mtge. 6% Bonds		225000000	BB						225000000	
	First Mtge. Bonds in Treasury	400000		BB'					400000		
	First Mtge. Bonds in Sinking Fund	61100000		BB'					61100000		
	Notes Payable		25000000	CC						25000000	
	Accounts Payable		122676090	DD						122676090	
	Accrued Interest – Notes Pay.			DD		(2) 81667				81667	
	Provision for Unclaimed Wages		234176	DD						234176	
	Provision for Taxes		500000	DD						500000	
	Bond Interest Accrued		1344637	EE						1344637	
	Reserve for Bad Debts		2332850	FF	(3) 109075					2223775	
	Reserve for Depreciation		196760680	GG						196760680	
	Reserve for Contingencies		32522701	HH		(4) 3750000				36272701	
	Surplus	41820000	205624269	JJ	(4) 3750000 (5) 7142868					152911401	Transferred to Balance Sheet
	Profit and Loss for Year			JJ1				Loss 21391501	21391501		
	Sales and Billings		132477400	JJ1				132477400			
	Adm., Selling and General Expenses	90642474		JJ1	(7) 9878		90652352				
	Taxes	16519600		JJ1			16519600				
	Dividend Income		4133750	JJ1				4133750			
	Interest Income		2119596	JJ1		(1) 82972 (6) 66264		2268832			
	Bond Interest	11328637		JJ1			11328637				
	Other Interest Expense	2560382		JJ1	(2) 81667		2642049				
	Misc. Income and Expense		871155	JJ1				871155			
	Depreciation	39087219		JJ1			39087219				
	Loss on Plant Dismantled and Sold	912781		JJ1			912781				
		2026597304	2026597304		11242724	11242724	161142638	161142638	1838005127	1838005127	

Comparative figures for previous period.

> Note to Reader --- It is not always possible to cross-index each item in the Trial Balance to the Balance Sheet, because sometimes a trial balance item must be divided between two or more balance sheet accounts. When a single interest account is kept, for instance, a part of it may represent interest payable accrued and in the balance sheet be included with the Accounts Payable, part may be included with Accounts Receivable as interest receivable accrued, while the balance represents profit or loss.

J.H.J.

The North American Shipbuilding Company. TB1

Adjusting Journal Entries taken up in the books – Dec. 31, 1922.

(1) Accrued Interest – Notes Receivable	829 72	
To Interest Income (To T.B.)		829 72
(F) (JJ2) To accrue the interest on o/s notes receivable to Dec. 31, 1922.		
(2) Other Interest Expense	816 67	
To Accrued Interest – Notes Payable (To T.B.)		816 67
(CC) To record the accrual of interest on o/s notes payable to Dec. 31, 1922.		
(3) Reserve for Bad Debts	1 090 75	
To Accounts Receivable – Moses & Brown (To T.B.)		1 090 75
(FF) To write off the account of Moses & Brown as uncollectable as of Dec. 31, 1922.		
(4) Surplus	37 500 00	
To Reserve for Contingencies (To T.B.)		37 500 00
(MM1) (JJ and HH) To record special appropriation per Directors' minutes Jan. 10, 1923.		
(5) Surplus	7 142 68	
To Bond Discount (To T.B.)		7 142 68
(MM1) (JJ) (J2) To record the writing off to Surplus of bond discount applicable to succeeding accounting periods, as per resolution of Directors, Jan. 10, 1923.		
(6) Cash	662 64	
To Interest Income (To T.B.)		662 64
(H1) Interest credited by bank for month of December		
(7) Administrative Expense	98 78	
To Cash (To T.B.)		98 78
(H3) Petty cash fund reimbursed for December vouchers		

– J.H.J.

The North American Shipbuilding Company (A)

Property and Plant

Dec. 31, 1922.

Balance, Dec. 31, 1921, per Auditor's schedules			799399656
Add:			
Construction Expenditures of Year	(A1)	51781832	
Miscellaneous additions	(A4)	2483143	54264975
			853664631
Deduct:			
Cost of Plant dismantled and sold	(A5)	5463128	
Miscellaneous credits	(A6)	544863	6007991
Balance, Dec. 31, 1922, per Balance Sheet			847656640
			(To B/S.)

— J.H.J.

The North American Shipbuilding Company.

Summary of Construction Expenditures for Year ending Dec. 31, 1922.

A'

Authorization No.		Order No.		Description of work or account chargeable	Amount of authorization	Expended to date: Purchased material, Amount verified	Purchased material, not verified	Miscellaneous charges, Amount verified	Miscellaneous charges, not verified	Total	Estimated Percentage to complete	Estimated Cost to complete	Authorization over or under (red)
M	708	Z	1259	"B" Combination Shop	2900000	A^2 2391507	A^2 172316	A^3 324047	A^3 13933	29018034	None	None	1803
M	710	Z	1261	Purchase of concrete pier	7000000	A^2 7000000	—	—	—	7000000	"	"	—
M	711	Z	1262-3	Install (1) 12,000-volt Feeder Cable	2000000	1361981	110296	—	509837	1982114	"	"	17886
M	712	Z	1264	Thread-rolling machine installed	375000	209377	43234	—	119339	371950	"	"	3050
M	713	Z	1265-7	Improv. to slip No. 3.	2455000	2117170	79735	—	260547	2457452	"	"	2452
M	714	Z	1268	Mch. head 2 mch. propellers	700000	495032	23640	—	233045	704437	"	"	4437
M	715	Z	1269	Hull Dept. additions Wayslip #1	445000	95261	180556	—	168068	443885	"	"	1115
M	716	Z	1270	Storage Warehouse No. 2	—	236625	20184	A^3 549328	A^3 196641	95878	"	"	95878
M	717	Z	1271	Purch. and install. (1) Spindle drill	350000	337500	618	—	13389	351507	"	"	1507
M	718	Z	1272	Purch. and install. (1) Radial drill	637500	192900	23628	—	422013	638541	"	"	1041
M	719	Z	1273	Const. (2) wooden pickling tanks	1050000	—	335	A^3 982088	A^3 83742	1066165	"	"	16165
M	720	Z	1274	Erection (2) knuckle-jointed jib cranes	750000	628000	71875	—	53528	753403	"	"	3403
M	721	Z	1275	Purch. and install. Thread-rolling mch.	521250	70700	—	450000	—	520700	"	"	550
M	722	Z	1276	Constructing slips 5 and 6	32250000	30000000	—	767993	—	30767993	5%	1500000	17993
M	723	Z	1277-8	Way Slip No. 4 Extension	160000	—	—	763440	—	763440	None	None	5314
—		—		Outside Work-shop Way Slip No. 4		—	—	608754	—	608754	"	"	—
M	724	Z	1279	Install. 500' salt water line	200000	—	27414	70154	2037	99605	50%	100000	395
M	725	Z	1280-1	4 concrete steps outboard Way Slip #4	2120000	1257500	48780	272861	84328	1663469	20%	445000	11531
					53913750	46393553	755331	2472501	2160447	51781832 (To A)		2045000	8698

Note to Reader ---- In practice each item listed above, or each more important item, would be further analyzed and verified, as illustrated for the first two or three items only. Many times, also, this Summary of Construction Expenditures would be considerably more involved, for the number of construction orders during a year would greatly exceed those shown.

Authorizations all approved by President of Company. Expenditures to date taken from Company's records, and verifications made as shown, and as per following schedules. Extensions and footings verified.
— J.H.J.

A2

The North American Shipbuilding Company.

Construction Expenditures — Purchased Material Vouched. Dec. 31, 1922.

Voucher No.	From whom purchased	Description	Order No.	Amount verified	Amount not verified	Total	Remarks.
1031	Kennith Machine Co.	14"x6" geared-head lathe & equip.	Z-1259	232810	11023		
1067	Lynn Farrel Co.	Triple plain radial drill	"	220000	1972		
1081	General Electric Company	four electric motors complete	"	292660	—		
1084	Smart and Marshall	material and wages	"	1146017	69024		
2012	Rumsly Electric Company	eight electric transformers	"	298184	—		
2091	Smart and Marshall	material and wages	"	497258	90512		
C-2007	General Electric Company	two motors returned	"	146330	3729		
C-2008	Rumsly Electric "	four transformers returned	"	149092	—		
				2391507	172316	2563823	
				To A1	To A1		
3009	Universal Shipbuilding Co.	concrete pier No. 7	Z-1261	7000000	—	7000000	See Minutes MM of 2/1, 1922
				To A1			

Note to Reader ---- In the conduct of an audit each important item of purchased material would be verified as illustrated for the first two items on schedule "A-1". It is also probable that such items as materials and wages would be further analyzed, together with a detailed examination of one or more payrolls, etc.

Observe how each total is indexed to the summary figure which it supports.

All vouchers were approved by the engineering department for receipt and quality of materials, and by proper officers for payment.

In the system of voucher numbering here used the three right figures designate the number of the voucher, whereas the figure, or figures, to the left designate the month. When the voucher number is preceded by "c" it refers to "credit memorandum."

— J.H.J.

The North American Shipbuilding Company.

A3

Construction Expenditures — Miscellaneous Charges

Dec. 31, 1922.

Date (month)	Order No.	Account classification	Detailed explanation	Amount verified	Amount not verified	Total
Feb'y	Z - 1259	"B" Combination Shop	materials and supplies used in installation	27147	4306	
			pay-roll - labor expense of installation	249018	8075	
			miscellaneous expenses incurred	47882	1552	
				324047	13933	337980
				TO A'	TO A'	
June	Z - 1270	Storage Warehouse No. 2.	materials transferred to other orders:			
			52 - 60 ft. poles $ 1060.80			
			142 - 50 ft. poles 3000.00			
			miscellaneous 1432.38			
				549328	196641	352687
				TO A'	TO A'	
August	Z - 1273	Wooden pickling tanks	requi. # 42675 - 24,800 ft. pine	111600	—	
			sawing, planing, and groving	271640	14010	
			pay-roll - labor expense of construction	494037	31928	
			miscellaneous supplies and expenses	104811	37804	
				982088	83742	1065830
				TO A'	TO A'	

Note to Reader ---- This schedule supports the first three items on "A-1" under "Miscel. Charges". All important items on "A-1" would be similarly supported, and even greater detail might be shown in some cases --- depending upon conditions found on the particular assignment.

Observe that each schedule should state definitely and fully what verification has been made, for many times the working schedule shows only the results obtained, and does not show the amount or nature of the work done. Only by a full statement of work done can a principal pass intelligently upon the sufficiency of the verification.

Material requisitions inspected for approvals: extensions and unit prices verified, etc. Pay-rolls inspected for approvals, footings verified, compared with original time records and checked against pay rates for two pay-roll weeks taken at random, and ending June 6th and December 19th. Pay-roll cash for December traced into cash records.

In case of miscellaneous expenses it was ascertained by test and analysis of the Company's records that only direct burden was included in construction costs.

— J.H.J.

The North American Shipbuilding Company. (A4)

Property and Plant — Miscellaneous Purchases 12/31, 1922

Voucher No.	From whom purchased	Description	Amount
	Furniture and Fixtures.		
1046	Robinson Crusoe & Co.	5 desks @ 40.00	200 00
1058	" " "	17 chairs @ 10.00	170 00
2016	" " "	10 tables @ 50.00	500 00
2038	Quimby & Smith, Inc.	57 steel files @ 30.00	1710 00
3029	" " "	10 cabinets @ 28.00	280 00
12016	Brown, Loughlin Co.	16 lockers @ 30.00	480 00
			3340 00
	Drafting Equipment.		
4019	Lincoln, Miller & Co.	24 drafting tables @ 250.	6000 00
5003	" " "	20 blue-print filing cases @ 32.	640 00
5096	Henderson Bros. Co.	1 Pease blue-print mch.	1800 00
5097	" " "	1 blue-print coating mch.	1000 00
6013	" " "	1 Revolute print mch.	1500 00
9006	Lincoln, Miller & Co.	2 Process tables	200 00
10017	" " "	1 pouring table	50 00
			11190 00
	Machinery & Equipment.		
5065	Vandyke Mfg. Co.	2 Amer. planers-36" # 8437-1	2774 06
5071	" " "	1-18" chill slotter	414 75
6037	Bliss, Jones & Co.	1 geared press	1308 00
8032	Pontiac Mfg. Corp.	1 Yale screw hoist	2902 72
10061	Severn Mfg. Co.	2 drills-42" Nos. 817 and 819	756 00
11107	Wilson, Oliver Corp.	3 planers-36" Cin 4470-2	2145 90
			10301 43
		Total	24831 43

(TO A)

All vouchers seen and inspected —
approved for receipt of
equipment, for payment,
etc. —

— J.H.J.

A5

The North American Shipbuilding Company

Property and Plant Dismantled and Sold.

Dec. 31, 1922.

Journal Vo. No.	Description	Book value (cost) of plant	Salvage value	Depreciation provided to date	Loss (or gain) chargeable to P.&L.	Annual depreciation rate	Remarks
1076	Hand-drawn ladder truck	33500	6000	27500	—	7½ %	The Company keeps no separate depreciation records for small plant items, and therefore it is assumed in all such cases that full depreciation (equal to the difference between cost and salvage value of the asset) has been provided.
1083	Two boilers – Woodward & Stone	100000	17000	70000	13000	10 %	
2069	Three-ton electric truck	493642	112500	296185	84957	30 %	
2076	Circular test table	3791	500	3291	—	7½ %	
3081	Pressure tank	42500	4500	34000	4000	20 %	
3096	12 work benches	48000	6000	40000	2000	16⅔ %	
4059	Tube bending machine	14028	1500	12528	—	7½ %	
4061	Tube machine # 16978	11000	1200	9800	—	7½ %	
5093	Keelway – concrete and piling	3047466	152791	2118829	775846	6½ %	Approximate.
5097	1 radial drill – Prentice # 59,843	133000	22000	99750	11250	7½ %	
	1 vertical " – " # 34,816	10500	1500	9000	—	7½ %	
	1 radial drill – " # 59,617	190000	55000	128250	6750	7½ %	
	1 " " – " # 59,618	190000	50000	142500	2500	7½ %	
7039	1 vertical boring mill # 18,972	546063	167500	382244	3681	7 %	
8066	1 double-end punch and shear # 52,623	232000	56000	174000	2000	7½ %	
9071	1 multiple spindle drill # 51904	120000	33000	72000	15000	7½ %	
10062	1-20" shaper – Chandler & Harris # 1643	67000	10100	56900	—	7½ %	
11079	4 turret lathes – S&W. # 30123-6	180638	31000	145479	4159	7½ %	
		5463128	728091	3822256	912781		
		TO A		TO GG	TO JJ1		

Note to Reader ---- When property is dismantled and disposed of the Property and Plant account must be credited for the book value (which should be cost) of the assets. The Reserve for Depreciation would be debited for the amount of the depreciation provided on these assets to the date of dismantlement; cash or accounts receivable or materials would be debited for the salvage value of the property sold or put into stores, and the profit and loss account would be debited (for loss) or credited (for over-depreciation) for the difference. In fact, during recent years the effect of continual surplus adjustments upon Invested Capital has made it practically necessary that the "pick-ups" or ordinary adjustments of each year be absorbed in the profit and loss account of the year.

In practice, however, it happens many times that very meagre plant records are kept, and when plant is dismantled and disposed of the net difference between the book value and the realizable salvage value of the assets is closed into the Reserve for Depreciation account. This procedure may be accepted by the auditor when he is convinced that approximately correct results are obtained thereby, for then business expediency and common sense require the acceptance of such a method.

Depreciation and plant records of company examined. Age of assets and depreciation rate ascertained, so far as feasible and the depreciation as computed to date was verified by test. It would require much detail work to ascertain the date of purchase of small items when purchased a number of years back, and the amount of error must necessarily be comparatively small.

All Journal vouchers were examined. In case of the sale of salvage the invoices were seen — where salvage value was determined by the Company the basis of valuing was inquired into (actual usable value of the salvage). — J.H.J.

The North American Shipbuilding Company. (A6)

Property and Plant – Miscellaneous Credits – Dec. 31, 1922.

Liberty Plant – Total Construction Cost	175864 65	
Less:		
Liberty Plant – Cost heretofore provided for	170215 10	
Balance, Dec. 31, 1921, per Auditor's schedules		5649 55
Less: Correction for duplicate charge for 4½ H.P. Electric Motor #50847 – per Journal Vo. #12067		200 92
Balance written off, Dec. 31, 1922		5448 63
		(To A and HH)

The Liberty Plant account relates to an agreement entered into in 1918 with the Emergency Fleet Corporation to construct an emergency repair plant at an estimated cost of $150000.00, of which $135000.00 was to be paid by the Emergency Fleet Corporation. The construction, as above, cost approximately $176000.00.

The details of the expenditures have been verified in previous audits, and a detailed investigation has not been made at this time. The cost provided for heretofore represents:

(a) Payments by Emergency Fleet Corp.	135000 00
(b) Write-offs to Reserve for Depreciation	15000 00
Total Estimated Cost	150000 00
(c) Written off to Reserve for Contingencies	20215 10
Total written off (Credits)	170215 10

The plant has served its purpose and is no longer of value.

During 1922, therefore, final corrections were made to the account and the balance, as shown above, was credited to Property and Plant and charged to Reserve for Contingencies. } HH.

— J.H.J.

The North American Shipbuilding Company. (B)

Special Funds with Trustees — Dec. 31, 1922.

Balance, Dec. 31, 1921, per Auditor's schedules	75965 98
Add: Cash payments to Trustee @ $10,416.67 per month	125000 00
Inspected the vouchers of the year, Nos. 1016, 2041, 3027, 4039, 5023, 6017, 7021, 8015, 9029, 10031, 11007, and 12019 — each voucher properly approved by Adam Bede, Treas.	
	200965 98

Deduct: Bonds redeemed during the year — 63 bonds (par $63,000.00) called as of January 1, 1922, and 62 bonds (par $62,000.00) called as of July 1, 1922, as follows: —

Jo. Vo.	No. of bonds	Date of call	Cost	
1004	54	Jan. 1, 1922	53909 62	See JJ2
1017	4	Do.	4000 00	
2038	2	Do.	2000 00	
7061	56	July 1, 1922	55962 23	See JJ2
7072	3	Do.	3000 00	
9086	1	Do.	1000 00	
12109	1	Do.	1000 00	
12109	2	Jan. 1, 1922	2000 00	
	123 (To BB1)			

Deduct total		122871 85
Balance, Dec. 31, 1922	(Cert. BB 1a)	78094 13
		(To B/S.)

One bond of each call, Jan. 1, 1922, and July 1, 1922, respectively, was unredeemed on Dec. 31, 1922. Notices from the Washington Trust Co., Philadelphia, regarding redeeming the above bonds were seen, but the Company's Treasurer stated that it might be several months before the Company received the cremation certificates. Meanwhile, the Trustee retains the redeemed bonds. — J.H.J.

The North American Shipbuilding Company. C

Investments - Sundry Stocks of Associated Companies Dec. 31, 1922.

	Par value	Book value
Balance, Dec. 31, 1921, per Auditor's schedule	450000 00	448000 00
Add: Purchases during year C'	9250000 00	8608750 0
Balance, Dec. 31, 1922, per Ledger	9700000 00	9056750 0
		(To B/S.)

— J.F.C.

Note to Reader ---- In determining the value of investments in associated or subsidiary companies the auditor (a) may accept them at their book value, specifically calling attention to this fact in the balance sheet or in his certificate, or (b) he may examine the separate balance sheets of the associated companies, stating the basis of their preparation, or (c) he may make a partial or complete examination of the several companies' books. The second method of verification is probably most often adopted in the case of a balance sheet or financial audit, and where a consolidated balance sheet is not to be prepared.

The North American Shipbuilding Company. C 1

Details of Investments in Associated Companies 12/31/1922

Description	Number of Shares	Par value	Cost	Book value
National Dry Dock Co. Com.	6000	600000 00	552000 00	552000 00
Turbine Mfg. Co. Common	2000	200000 00	190000 00	190000 00
Virginia Coal, Iron and Coke Co. Com.	1250	125000 00	118875 00	118875 00
Purchases of 1922 MM	9250	925000 00 To C	860875 00	860875 00 To C
Previously owned.				
Consol. Gas, Elec. Lt. and Power Co. Com.	450	45000 00	44800 00	44800 00

All of above securities pledged with Trustee of Collateral Trust 5½ % Five year Sinking Fund Gold Notes — see Cert. BB 2a.

Purchases of 1922 authorized by resolution of Board of Directors under date of March 17, 1922 — see Minutes (MM).

Broker's advices for the purchases of the year were inspected.

9250 shares purchased during August, 1922.

In none of the above companies does the North American Shipbuilding Company own a majority of the Capital stock outstanding. The balance sheets of the several companies, as prepared by their respective auditors, were presented to us, viz:

J.H.C.

	Shares o/s	Par value	Book value	Value of this Company's holdings
National Dry Dock Co., Com.	20000	2000000 00	2817483 62	842245 09
Turbine Mfg. Co., Common	50000	5000000 00	5673819 72	226952 79
Vir. Coal, Iron and Coke Co., Com.	10000	1000000 00	1624382 96	203047 87
Cons. Gas, El. Lt. & Power Co. Com.	10000	1000000 00	2316907 86	104260 85
Total				$1376506 60

The North American Shipbuilding Company. (D)

Inventories – Summary

	Dec. 31, 1921 Raw Materials	Dec. 31, 1921 Work in Progress	Dec. 31, 1922 Raw Materials	Dec. 31, 1922 Work in Progress
Mfg. Supplies, Stores, etc. (D2)	Comparative Figures		230964 36	294 65
Lumber			81947 45	
Brass Foundry – Materials			31498 71	2226 05
Fuel			29629 17	
Blooms, Billets, Bars, etc.			57767 95	
Plates and Shapes			141794 24	
Tool Steel			19644 92	
Unaudited Frt. Bills			3794 28	
Labor, Materials and Expense, less bills rendered and partial profits on Contracts (D5)				766395 25
Suspended Cost – vessels (D11)				50254 92
Operating Expense balances				289 32
Totals			597041 11	819460 19
			(To B/S)	(To B/S)

– A.H.A.

Note to Reader ---- In practice each amount listed above, or each amount of comparative importance, would be analyzed and verified, as illustrated for three items only. Many times, in the case of a large audit, the inventory schedules alone require several hundred pages --- in which case, ordinarily, a separate file of working papers is prepared for inventories, with only an inventory summary (similar to the above) included in the main file working papers.

Unaudited Freight Bills represents freight bills not yet passed for payment but which at the end of the year have been taken up into the accounts by debiting Inventories (as above) and crediting Accounts Payable. As soon as the bills are passed for payment the amount will be included with the appropriate raw materials' items above.

It is desirable to prepare all summary schedules in comparative form, for they show a Company's financial position as compared with the previous period, and thus assist in determining the relative earning prospects of a company for the following period.

D'

THE NORTH AMERICAN SHIPBUILDING COMPANY

Certificate of Inventory, January 20, 1923.

We hereby certify that the Inventories as of December 31, 1922, were made under our supervision and were taken as follows:-

Quantities.

In respect to raw materials and supplies, and work in progress, the inventories were taken by actual weight, count, or measurement, or by conservative estimates of quantities where such materials could not readily be taken by actual physical examinations.

Physical verifications, covering most of the inventory, were made shortly before the close of the year, and the books were adjusted where necessary.

Valuations.

(a) In the case of raw materials and supplies, amounting to $597,041.11, the values applied were cost or market, whichever was lower. Deductions have been made for damaged or obsolete stock.

All materials and supplies in transit which had passed the f.o.b. point at December 31st have been included in the inventory.

(b) In the case of work in progress, amounting to $819,460.19, the values applied were actual cost, and provision has been made to cover all losses accrued to date.

Product billed, but not shipped, has not been included in the inventory.

(Signed) Tristram Shandy, Works Mgr.
John Halifax, Jr., Stores Clerk
Roderick Randam, Stores Clerk

The North American Shipbuilding Company. D2

Manufacturing Supplies, Stores, Etc. Dec. 31, 1922.

Description		Amount	
General Storehouse Supplies	D3	4052293	
Tools, Drills, Reamers, Taps, etc.		727115	
Rivets, Bolts, Nuts, Etc.		4423094	
Electrical Stores		2667250	
Copper and Composition Materials		3334825	
Bar Stock - Brass		2920057	
Steel Pipes, Tubes, Etc.		1747903	
Galvanizing Supplies		575714	
Refractories and Building Materials		382428	
Paints and Materials for Paint		674752	
Restaurant Supplies		30099	
Merchandise Stores		1437146	
Crucibles		123760	
Total Raw Materials	To D		23096436
Galvanizing Scrap	To D		29465

— a.H.a.

Note to Reader ---- Ordinarily in practice each of the above amounts, or each item over a given amount, would be further analyzed -- as illustrated for the first amount only.

The North American Shipbuilding Company. D3

General Storehouse Supplies Dec. 31, 1922.

Description		Amount
General Stores	D4	1339286
Copper Sheet, Sheet Metal & Plumbing Stores		298701
Carpenter Shop Stores		130689
Paint Shop Stores		220588
Rigging Department Stores		624185
Joiner Shop Stores		157921
Sheet Metal Shop Stores		49208
Obsolete Material (at scrap value)		1231715
Total	To D2	4052293

— a.h.a.

Note to Reader ---- Ordinarily in practice each of the above items, or each item over a given amount, say $1,000.00, would be further analyzed -- as illustrated for the first amount only. The size of the items for which no further verification would be made would be determined largely by conditions, such as the sufficiency of the existing system of internal check, and by the relative size of such items to the inventory as a whole.

The North American Shipbuilding Company. D4

General Stores — Dec. 31, 1922.

Description	Units	Rate	Amount
Tools	—	—	134782
Rivets	—	—	86742
Bolts, Nuts, etc.	—	—	78563
Pipe and Fittings, Copper	—	—	163388
Pipe and Fittings, Steel	—	—	120636
Bars – Copper	9369	$0.1712	160397
Refractories	—	—	16469
Bars – Iron	8459	$0.0050	4230
Bars – Steel	2320	0.0202	4686
" " – Surplus	523830	0.0050	261915
" – Nickel Steel – Surplus	14372	0.0044	6324
General	—	—	301154
Total		To D3	1339286

Extensions and footings verified.
Prices tested as per D12 — a.H.a.

The North American Shipbuilding Company.

D5

Summary of Work in Progress — Labor, Materials and Expenses less Bills Rendered and Partial Profits on Contracts — Dec. 31, 1922.

Description		Cost (1)	Amount of Bills Rendered (2)	Partial Profits Taken up (3)	Amount of Cost billed (4) = (2) − (3)	Inventory value (5) = (1) − (4)
Vessels	D6	3231320127	3463364233	307370899	3155993334	7532693
Engines, Boilers, Etc.		163778948	177619634	14716348	162903286	875662
Vessel Repairs		3701886	3420654	—o—	3420654	281232
Miscellaneous Manufactured Products		5935483	3600000	2090482	5690482	245001
Miscel. Labor, Materials and Expense for Others		89163	—o—	—o—	—o—	89163
Totals		3404647281	3648004521	319996765	3328007756	76639525 TO D

Note to Reader ---- In this schedule, as in preceding inventory schedules, each item above would probably be further analyzed and verified, as illustrated for the first item only.

In the case of construction work on all vessels or ship parts it should be understood that, in many cases at least, the builder may render monthly bills to the customer for all or for a large portion of the work done during the month on the vessels, plus the proportional part of the profit accruing to the builder. The inventory of vessels in construction, then, is the difference between the total bills rendered and the partial profits included in those billings, which difference is deducted from the total costs incurred to date. See schedules D-5 (above) and D-6.

Where vessels are to be constructed at a definite and stated contract price, it is very questionable whether any partial profits should be taken up in the accounts prior to the completion of the vessels. The amount of such profits would be largely or entirely guesswork, and a loss might ensue before the vessel was completed.

The cost-plus contracts for vessels and for engines, boilers, etc., provide that the builder may render bills periodically to the customer for the cost of work done to date on contracts, plus a proportional part of the profits (this proportional part of the profits to be based ordinarily on the original estimated cost of the vessel or vessels).

Figures summarized from Company's records.

— A.H.A.

D6

The North American Shipbuilding Company.

Summary of Work in Progress — Vessels.

Dec. 31, 1922.

Order No.	Customer	Description	Cost (1)	Partial Profits (2)	Cost plus Partial Profits (3)=(1)+(2)	Amount of Bills Rendered (4)	Inventory Value (5)=(3)-(4)	Remarks
V-693	U. S. Navy	Battleship	781678329	69587512	851265841	827691250	23574591	Cost + $1,650,000.00 = contract.
V-695	U. S. Navy	Battle Cruiser	1157131065	96340795	1253471860	1230511674	22960186	Cost + $2,100,000.00 = contract.
V-696-9	U. S. Navy	4 Submarines	170637106	11768376	182405482	167054667	15350815	Cost + $70,000.00 each = contract.
V-703-4	Star Steamship Line	2 Tankers	340761863	26511123	367272986	358527349	8745637	Cost + 8½% = contract.
V-705-6	Inter-Ocean S. S. Company	2 18,000-ton Steamers	410630092	40031262	450661354	447586591	3074763	Cost + 10% = contract.
V-708-11	Durward S. S. Company	4 12,000-ton Steamers	356044122	63131831	419175953	417697329	1478624	Cost + 17½% = contract.
	Miscellaneous	Boats and launches	14437550	——	14437550	14295373	142177	
	Totals	(See D7)	3231320127	307370899	3538691026	3463364233	75326793 (To D5)	

Note to Reader ---- In the case of a recurring audit it is necessary to verify only the transactions of the period under audit, thus beginning with the auditor's balances as of the close of the former audit period. As the purpose of schedule "D-6" is to analyze the $753,267.93 composing the largest portion of the Worked Materials inventory (see schedule "D"), it becomes desirable to prepare an additional schedule to show for the year under audit the changes in the costs, in the bills rendered, and in the partial profits taken up in the accounts. This is shown in schedule "D-7".

Contracts seen as per previous audit. Approximately $8000.00 more than contract profit included in partial profits taken up on the books on Orders No. V-708-11; no adjustment made in Company's accounts. Figures taken from Company's records — cross-additions and footings verified.

— A.H.A.

D^7

The North American Shipbuilding Company.

Work in Progress — Vessels — Changes during Year ending Dec. 31, 1922.

Order No.	Customer	Description	Costs: As of December 31, 1921.	Costs: Changes in 1922 (deductions in red).	Costs: As of December 31, 1922.	Bills Rendered: As of December 31, 1921.	Bills Rendered: Changes in 1922 (deductions in red).	Bills Rendered: As of December 31, 1922.	Partial Profits: As of December 31, 1921.	Partial Profits: Changes in 1922 (deductions in red).	Partial Profits: As of December 31, 1922.
V-693	U. S. Navy	Battleship	752643817	29034512	781678329	789640683	38050567	827691250	66041237	3546275	69587512
V-695	U. S. Navy	Battle cruiser	1116031922	41099143	1157131065	1181353902	49157772	1230511674	94037916	2302879	96340795
V-696-9	U. S. Navy	4 Submarines	162030791	8606315	170637106	156820319	10234348	167054667	11211862	556514	11768376
V-703-4	Star S. S. Line	2 tankers	168391479	172370384	340761863	169011762	189515587	358527349	13091304	13419819	26511123
V-705-6	Inter-Ocean S.S. Co.	2 steamers	136140019	274490073	410630092	140761006	306825585	447586591	13560417	26470845	40031262
V-708-11	Durward S. S. Co.	4 "	68091263	D^8 287952859	356044122	71626196	D^8 346071133	417697329	12433322	D^8 50698509	63131831
	Miscellaneous boats		—	14437550	14437550	—	14295373	14295373	—	—	—
	Totals		2403329291	827990836	3231320127	2509213868	954150365	3463364233	210376058	96994841	307370899
					To D^6			To D^6			To D^6

Vessels Completed.

Order No.	Customer	Description	Costs: As of December 31, 1921.	Costs: Changes in 1922	Costs: As of December 31, 1922.	Bills Rendered: As of December 31, 1921.	Bills Rendered: Changes in 1922	Bills Rendered: As of December 31, 1922.	Partial Profits: As of December 31, 1921.	Partial Profits: Changes in 1922	Partial Profits: As of December 31, 1922.
V-700-2	Overseas S.S. Lines	3 tugs	4721675	11551262	Completed	5023634	14733097	Completed	336921 8	2537076	Completed
V-707	E-C S. S. Co.	1 steamer	6851129	26093417	"	7328642 9	2871357 1	"	8023016	627562	" *
V-712-3	Harbor S.S. Corp.	2 tugs	2619631 2	14009628	"	2353078 4	20695750	"	2811783	1208811	"
			2545248407 JJ^3			2656267215 JJ^3			2245800 75 JJ^3		
	Totals for 1922			879945143 JJ^3			1018292783 JJ^3			100113166 JJ^3	

*Contract price of vessel was $1,020,000.00; others on a cost-plus basis.

Figures as of December 31, 1921, taken from auditor's working papers for previous audit. Changes for 1922 taken from Company's records and figures for December 31, 1922, then computed. Closing figures then compared with Company's records. Cross additions and footings verified. — A.H.A.

Note to Reader ---- In the case of a balance sheet audit the volume of work done on the inventories of work in progress from this point on would depend largely upon general conditions, upon the existing system of internal audit (it should be emphasized again that an auditor should not make a limited-test audit which will serve as a basis for certifying a balance sheet until he has satisfied himself of the sufficiency of the existing system of internal check), and upon the senior or managing accountant in charge of the assignment. The costs, billings, and profits taken up for the period probably would be thoroughly tested, as illustrated on schedule "D-8" for Order Nos. V-708-11 (see above).

The North American Shipbuilding Company.

D8

Work in Progress – Vessels — Analysis of Orders Nos. V-708-11 for Year Dec. 31, 1922.

Cost charges for Year 1922

Month	General Material	General Labor	General Expense	Hull Material	Hull Labor	Hull Expense	Engineering Material	Engineering Labor	Engineering Expense	Bills Rendered	Partial Profits Amount (17½%)	Journal Vo. No.
January	57183	—	10376	12533316	1718016	1510117	1612492	247139	114243	30160498	1721137	J- 1046
February	810963	17085	20957	* 19041293	* 3561340	* 2061493	2789462	462515	140807	28541396	3851622	J- 2034
March	164507	24560	40591	13126129	4988122	2612310	4951671	513092	151959	30097137	2678329	J- 3041
April	138356	43862	105640	8936281	5712831	2916343	6121283	1089065	441411	29178349	4521786	J- 4038
May	456128	76055	38096	9461113	4011627	2286042	6211713	236540	149710	24138167	4284152	J- 5043
June	29083	86701	80109	9618334	6343077	2750099	° 9170354	* 1121357	* 287304	31548792	2940317	J- 6029
July	51116	51730	26074	6012084	5121223	2650313	8075539	1208990	461729	29261788	4821264	J- 7039
August	18654	74318	116255	2288309	3650102	2391233	7445304	1134129	620173	21241365	3529677	J- 8032
September	° 1464412	121922	181199	* 11064792	* 5240788	* 3310871	4522747	1218762	789065	30670483	5968345	J- 9045
October	* 369177	100759	221310	3120367	4610106	2964049	8621263	987576	678328	24511227	5571081	J-10028
November	* 458018	131217	141563	4280119	4233358	3067821	5090802	1141269	821166	32561209	4519001	J- 11039
December	* 1860517	* 158033	* 237516	° 8210188	* 5926312	* 3827613	* 6154321	* 1478216	* 1121973	34160722	6291798	J-12064
	3305926	886242	1219686	107692325	55116902	32348304	70766951	10838650	5777873	346071133 TO D7	50698509 TO D7	

General: 5411854 Hull: 195157531 Engineering: 87383474

287952859 TO D7

Note to Reader ---- By the time the principal who reviews the working papers has seen this schedule he knows pretty definitely what verification has been made of Work in Progress, and he either is or is not prepared to pass the item on the Balance Sheet for certification. Assistants should invariably remember to state definitely in connection with their working schedules what work has been done.

All Journal Vouchers for partial profits taken up in the accounts, and duplicates of all bills rendered were seen.

*These items were checked to the detail cost records and thorough tests were made of all the larger amounts.

°These items were verified in detail, and listed as per schedule "D-9". — A.H.A.

The North American Shipbuilding Company. D9

Work in Progress — Vessels. Dec. 31, 1922.

Analysis of Material Charges

for Order Nos. V-708-11.

General — September.			
Purchases	(see D 10)	18965 45	
Freight		122 16	
Stores		3931 74	
Lumber		560 29	
Blue prints		178 62	
Miscellaneous adjustments:—		—	
Suspense charges		112 86	
Payroll		92 15	
Miscellaneous order clearings		71 93	14644 12
			(To D 8)
Hull — December.			
Purchases	(see D 10)	66983 17	
Freight		3281 94	
Castings		1673 46	
Galvanizing		43 88	
Stores (per requisitions)		7817 54	
Lumber		1006 79	
Tool treatment		37 86	
Locomo. cranes		473 69	
Miscel. order charges		783 55	82101 88
			(To D 8)
Engineering — June.			
Purchases	(see D 10)	88437 96	
Freight		283 81	
Castings		364 28	
Tool treatment		28 43	
Stores (per requisitions)		2421 95	
Lumber		80 92	
Annealing		48 34	
Locomo. cranes		37 85	91703 54
			(To D 8)

— A.H.A.

The North American Shipbuilding Company D10

Work in Progress – Vessels Dec. 31, 1922.
Test of Materials' charges to
Orders Nos. V–708–11.

Vo. No.	Description	Amount	
	General – September.		
9029	Jeckyll & Hyde Builders' Risk Ins. to 8/20/23	618435	
9030	" " " " " "	1278240	1896675 (To D9)
	Hull – December.		
12067	Carnegie Steel Co. 26020 lbs. steel bars	170432	
12042	" " " 19960 " " "	76840	
12097	" " " 16420 " " "	50028	
12101	" " " 18260 " " "	54340	
12088	" " " angles	42069	
12089	" " " 9 deck plates	554368	
12090	" " " 6 " "	272819	
12107	" " " 18 " "	463528	
12109	" " " 19 " "	786294	
12114	" " " 13 " "	473829	
12123	" " " 6 " "	1896240	
12137	" " " 4 " "	1304692	
12096	" " " 12 " "	358456	
12104	Bethlehem Steel Co. 8 ring segments	118768	
12106	" " " 1 distance casting	75614	6698317 (To D9)
	Engineering – June.		
6139	General Electric Co. propelling mchy.	6500000	
6178	Brown & Wilcox 12 super heaters	2289260	8789260 (To D9)

All original invoices, except for small adjustments, examined. — A.H.A.

Note to Reader ---- Observe that of the above amounts only one ties up exactly with the figures on schedule "D-9". The auditor, having satisfied himself as to the sufficiency of the system of internal check, does not necessarily inspect every voucher, but makes an approximate verification, or test, only.

The North American Shipbuilding Company. D 11

Suspended Cost — Vessels — Dec. 31, 1922.

Construction Order No.	Customer	Description	Amount
V-693	U. S. Navy	Battleship	1963164
V-695	U. S. Navy	Battle Cruiser	2555636
V-696-9	U. S. Navy	4 Submarines	506692
			5025492
			To D

This represents amounts included by the Company in the costs of construction of vessels and disallowed by the Government's representatives. As the items have not been permanently disallowed by the Navy Department, and probably many of them will ultimately be allowed, they are carried in the Work in Progress inventory.

Checked to Company's records and all larger items traced to original records —

— ASHA.

D[12]

The North American Shipbuilding Company.

Price Testing — Raw Materials and Supplies as of December 31, 1922.

Inventory Sheet No.	Description	Quantity	Total value	Unit value: Unit of quantity	Unit value: Unit of price	Prices how verified: Late invoices	Prices how verified: Average per Stock books	Prices how verified: Invoices to stock books tested	Market price at date of inventory: Price	Market price at date of inventory: Where obtained	Price used in inventory last year.
1	Belting - Double - 4½"	217 8/12'	21157	Foot	$.9720	✓			$.9720	Fairbanks Co.	$1.0325
7	Cloth - Aloxite #1	4707 yds	24561	Yard	.05215	✓			.05215	" "	.06105
36	Rivets - Oval Head Med. 7/8"x2"	8273 lbs.	24405	Lb.	.0295	✓			.0295	Beth. Steel Co.	.0310
42	" - Pan Head Med. 7/8x2 1/8"	139,400 "	376380	"	.0270	✓			.0270	" " "	.0288
55	" - Pan Head Med. 3/4"x1 3/8"	420,650 "	210325	"	.0050	✓			.0050	Surplus scrap	.0275
58	Bolts - Service Std. Thd. 7/8x3"	226,721 "	925021	"	.0408		✓		—	" "	.2055
65	" " Acme with nuts 1"x4	280,338 "	140169	"	.0050		✓		—	" "	.0240
71	Pipe Brass — 3½"	105,560 "	844480	"	.0800	✓			.0800	Am. Mch.	.0850
82	Metal, Monel Flat 3/4"x1"	10,487 "	419480	"	.4000		✓		.4250	" "	.4850
88	Naval Brass Rod 3/4"	19,996 "	159968	"	.0800		✓		.2500	Surplus scrap	.2975
97	Pine White F.C. and better 2"x8" and up	8,366 ft	152437	M-ft.	$182.21	✓			$185.00	Eastern Lbr. Co.	$205.50
98	" Yellow K.D.B. and better partition	29,963 "	123118	" "	41.09	✓			42.00	" " "	48.50

Note to Reader ---- The above schedule represents items picked at random from the Company's inventory sheets, for the purpose of testing prices as of the close of the audit period. The proportion of the prices in the inventory which will be verified will ordinarily be determined by the in-charge senior, or perhaps by conference with the supervising or managing accountant.

Inventories of Work in Progress are based entirely upon costs — as per schedules "D-5" ff. and "D11". — A.H.A.

The North American Shipbuilding Company. D 13

Inventory – Statement of Work Done – Dec. 31, 1922

Raw Materials and Supplies:

1. Checked as to quantity and price approximately 70% of amounts shown on inventory sheets from inventory cards – (pages 1-15 = 21-33 = 39-64).

2. Checked footings of inventory sheets to nearest dollar and checked sheet totals to group summaries.

3. Checked to the dollar column all extensions over $200.00 and tested others under this amount.

4. Verified additions of group summaries and prepared Final Inventory Summary.

5. Tested prices in valuation of inventory:
   (a) cost prices with original invoices.
   (b) market prices with current quotations from sundry sources (per schedule D-12).

Work in Progress:

1. Exhibit of unfinished work at Dec. 31, 1922, was compared with the balances shown in the unfinished work ledger.
   Sundry extra orders are not recorded in the ledger but are compiled from month to month from previous exhibits.

2. Footings of unfinished work were checked.

3. The totals of the unfinished work exhibits were compared with the totals shown in the subsidiary ledger under the headings of Labor, Materials, Indirect Expense, and other direct charges.

The North American Shipbuilding Company. D14

Inventory – Statement of Work Done – Dec. 31, 1922.
(Continued.)

Work in Progress (continued):

4. Piece and day-work earnings were tested with the pay-rolls and the pay-roll distributions.

5. Pay-roll summaries were tested with the pay-rolls.

6. Pay-roll distribution register was tested with the Distribution Summary.

7. Pay-roll Distribution Summary was tested with the Unfinished Work Exhibit as at Dec. 31, 1922.

8. Material requisition forms were tested with the material distribution book.

9. Material distribution book was tested with the Unfinished Work Exhibit as at Dec. 31, 1922.

10. Cost summaries were checked with distribution sheets for December, 1922, and the total of the Distribution Sheets was compared with the amounts shown on the Unfinished Work Exhibits.

11. The total of the indirect expense analysis book, showing the actual balances of burden expenses, was compared with the combined totals of the Unfinished Work Orders (that is, the indirect expenses included in these Unfinished Work Orders) and the Burden in Excess of Normal (a P. and L. account).
— A.H.A.

Note to Reader ---- A verification of the inventory as complete as the above is possible only when the business under audit possesses a very good cost-finding system. When such a system does not exist tests and approximate proofs only must be made.

The North American Shipbuilding Company (E)

Accounts Receivable – Summary

Dec. 31, 1921.			Dec. 31, 1922.
	Balance, per General Ledger Trial Balance	E[1]	1110404 53
	Add: Accounts Rec. credit balances	To III	1235 0
	Total Accounts Rec. *debit* balances		1110528 03
	Add: Accounts Payable debit balances	DD	958 35
	Interest Accrued on Notes Receivable	F	829 72
	Total		1112316 10
	Deduct: Reserve for Bad Debts	FF	22237 75
	Balance, Dec. 31, 1922, per Balance Sheet		1090078 35 (To B/S)

— J.F.C.

The North American Shipbuilding Company. E'

Accounts Receivable — Details

Dec. 31, 1922.

Customer	Balance due Dec. 31, 1922	Balances consist of: Current	Over 60 and less than 90 days old	Over 90 and less than 120 days old	Over 4 months old	Last payment: Date	Last payment: Amount	Approved by Adam Bede, Treas, as good and collectible	Provided for doubtful accounts
Adams Sailboat Company	1058475		168245			Dec. 5th	138496	Good—	
American Yacht Club	1256679		461192			" 28th	378642	"	
Atlantic Refining Company	3776354								
Boston Steamship Line	907815		61280	111864	41216	Nov. 27th	160000	Good—	
Brosius and Wilcox Company	499289			201669		Aug. 20th	119178	Bill in dispute	FF 201669
Burleigh Steamship Company	376354								
Camden Iron and Metal Company	12350								
Carnegie & Williams	375657		81604			Dec. 16th	18433	Good—	
Dalton Lumber Company	106662								
Durward S. S. Company	27122207		967959			Dec. 20th	21600485	Good—	
Falk Company, The	527288								
Inter-Ocean S. S. Company	29902049		1512163			Dec. 10th	2721864	Good—	
Jeckyll & Hyde, Underwriters	800055	Not necessary to list.		800055				"	
Johns-Mansville Company	204502								
Kissel Engine Co., Inc.	406400			216480		Sept. 30th	168492	Good—	
Newark Transportation Co.	152900								
Porter, Buxton, Doan Co.	44650								
Star Steamship Lines	23292306		5003423			Dec. 28th	18320916	Good—	
Standard Oil Co. of New York	1073403								
Strawn Propeller Company	802889		316216			Dec. 8th	246134	Good—	
Sun Yachting Club	638795								
Union Ward Lines	671378								
United States Navy Dept.	13377675		1260485	304916	10965422	Nov. 10th	8301622	Good—	
United Supply Station	432711								
Western Shipping Company	1535534		211221			Dec. 16th	489174	Good—	
Whiteside Fleet Corporation	1152812								
Wright Foundry Company	557964			86000		Dec. 8th	168491	Pending settlement	FF 86000
	111040453 TO E	✓	10043788	1720984	11006638				

Note to Reader ---- In practice many times the client prepares a typewritten list of the accounts receivable for the auditor -- in such cases the lists are merely checked against the Accounts Receivable ledgers and the footings are verified. In cases where no such lists are prepared by the client the auditor usually lists only the larger amounts -- say, for illustration, balances due of over $1,000 or $5,000 (depending somewhat upon the total of the accounts receivable outstanding, and of the total of the assets to be verified). The auditor would, in either case, list or designate all past-due accounts, which he would later take up with the proper responsible official (usually the Credit Manager or the Treasurer), as well as all accounts in which there appeared either a debit or a credit entry requiring special explanation.

Sixty to ninety days represents the normal credit period in this business — current accounts not considered.
Accounts were listed from Accounts Receivable Ledger, and footed. Notations in the accounts regarding bankruptcy, receivers, etc., were watched for, but none were found. Large balances were scrutinized, but represent only current billings except U. S. Navy account which, we are informed, will be fully settled in due course. Scrutinized accounts for notes receivable charged back, also for credits during last few days of year to close old accounts. Any such credits were gone into thoroughly. All past due accounts approved by Treasurer. Reserve considered ample. — J.F.C.

The North American Shipbuilding Company.

(F)

Notes Receivable

December 31, 1922.

Name of Maker	Date of Note	Due Date	Net Amount (face less payments on principal)	Verification	Collateral held or endorsements	Remarks	Interest Accrued: Rate per annum	Date to which interest is paid	Number of days to accrue	Amount
Penna. Employees Assoc.	7/1, 1917	1/1, 1923	* 3190 07	Note seen — J.H.J.	Endorsed by A. J. Smith	Renewed for 5 years	4%	None paid	5½ years	70 81
James A. Cockran	4/16, 1920	Demand	750 00	" " — J.H.J.	None		6%	12/31, 1922	None	—
John Adams	4/1, 1922	4/1, 1923	2000 00	" " — J.H.J.	$2500. Lib. 4th 4¼'s – seen J.H.J. – (TO G.)		6%	7/1, 1922	6 mos.	60 00
Wm. J. Miller	7/31, 1922	1/31, 1923	2716 55	Cash collection traced to Cash Book – J.H.J.	None	Paid 1/31, 1923	6%	None paid	5 mos.	67 91
			8656 62 (TO B/S.)							829 72 (TO E)

*This note is more liquid than it appears, for the Treasurer informs us that if the Company really needed this money the Association could quite readily borrow it elsewhere. It would appear that the Company loses money on the loan, but the goodwill of the Company's employees more than offsets any such apparent loss. The accumulated interest was paid as of January 1st and the note was renewed for an even $3000 00 — shortly after we had examined the notes receivable. All notes pronounced good by the Treasurer of the Company.

Company's list of notes as of Dec. 31, 1922, and all notes on hand on date of our examination were called for and examined. No additional notes on hand. Cash collections were traced into the Cash book and it was further ascertained by examination of Cash disbursements that entries were not merely journal entries.

Notes on hand were seen and listed by J.H.J. and A.S.H.A. on January 2, 1923, at 10:30 a.m. — in connection with the cash count — and this list was also checked against the Company's list.

Interest formerly not accrued and taken up in the accounts. The amount involved in case of the 5½-year accrual is too small to warrant an adjustment to Surplus.

— J.H.J.

The North American Shipbuilding Company. (G)

Sundry Marketable Securities Dec. 31, 1922.

Cost and book value.

First Liberty Loan Conv. 4 1/4's (par) 9200000 @ cost 9045550 (To B/S.)

Counted January 2, 1923, at 10:00 a.m. at vaults of the University Trust Company by A.H.A. and J.H.J. — in presence of Adam Bede, Treasurer.
All unmatured coupons attached.
Broker's advices for purchases scrutinized.

Also counted $2500 (par) Liberty 4th 4 1/4's held as collateral on the $2000 note of John Adams, due 4/1, 1923 — see schedule "F"

Market value of securities was approximately par ($92,000.00) at Dec. 31, 1922. — J.H.J.

Note to Reader ---- It should be understood by the reader that the "broker's advices for purchases", referred to above, were scrutinized and that the "market value of securities" was ascertained at dates later than the count. It is very probable that the market value of the securities was ascertained even after the auditor returned to his own office --- it is only accidental that in this case the count was made by the party who also made the later verification.

Accrued interest on the above marketable securities from December 15th, and amounting to $162.92, ordinarily would be taken up in the accounts and included in the Accounts Receivable.

The North American Shipbuilding Company (H)

Cash - Summary

Dec. 31, 1921.			Dec. 31, 1922.
	Balance, Washington Trust Company	H[1]	307192.59
	Balance, University Trust Company	H[2]	331032.67
	Petty Cash	H[3]	1000.00
	Cash Balance, December 31, 1922		639225.26 (To B/S)

—A.H.A.

The North American Shipbuilding Company. (H')

Cash Reconciliation – Washington Trust Company, Philadelphia – Dec. 31, 1922.

Balance, Dec. 31, 1922, as per Bank Certificate (H 1a) 32157616

Deduct: Outstanding cheques:

Date	Number	Paid by Bank	Amount	
12/27, 1922	2266	Jan. 4, 1923	462677	
12/28, 1922	2270	" 5, 1923	156264	
12/29, 1922	2271	" 4, 1923	512500	
12/31, 1922	2276	" 6, 1923	306916	1438357

Balance (as adjusted), per Cheque Book, Dec. 31, 1922 30719259

(To H)

Note: Balance, per Cheque Book, before taking up December interest 30652995
Interest credited by bank for December and taken up in books per adjusting journal entry (No. 6) 66264
Balance, as above 30719259

– J.F.C.

Note to Reader ---- In practice it is probable that the above note would not be included on the working schedule, but it is shown here in order that the reader may be able to trace the adjusting journal entry to the working trial balance and to the cash schedule. The interest item would be taken up in the general financial books as well as in the cheque book. The general cash balance as recorded in the financial books would equal the sum of the cheque-book or bank-reconciliation balances.

Bank Washington Trust Co., Philadelphia.

IF THIS FORM IS NOT USED IN REPLYING PLEASE MENTION REFERENCE J. H. J.

H/a

BANK CERTIFICATE

Messrs. Scrooge & Marlowe,
20 South Broad Street,
Philadelphia, Pennsylvania.

Dear Sirs:

We hereby certify that the balance(s) on our books to the **credit** of The North American Shipbuilding Company, Philadelphia, Penna. at the close of business December 31, 1922 192- was ~~were~~ Three Hundred Twenty-one Thousand Five Hundred Seventy-six Dollars Sixteen Cents ($321,576.16). To H'

Yours very truly,

January 8, 1923. 192 (Signed) SILAS MARNER
~~Cashier~~
Treasurer

NOTE:—If the depositor has more than one account with you, please indicate the balances on the several accounts.

The North American Shipbuilding Company. (H2)

Cash Reconciliation – University Trust Company, Philadelphia – Dec. 31, 1922

Balance, Dec. 31, 1922, per Bank certificate (H2a) 395712 62

Deduct: Outstanding cheques:

Date	Number	Paid by bank.	Amount	
9/10, 1922	17817	Jan. 3, 1923	2901 13	
9/10, 1922	17818	" 5, "	8352 67	
10/18, 1922	18496	*	1000 00	
10/29, 1922	18698	*	598 59	
11/28, 1922	20339	Jan. 8, 1923	9 27	
11/29, 1922	20346	" 9, "	5 64	
"	20349	" 9, "	15966 00	
"	20351	" 7, "	92 00	
"	20355	" 3, "	6668 90	
"	20356	" 7, "	1000 00	
"	20361	" 5, "	2770 00	
12/29, 1922	22109	" 4, "	2 08	
"	22113	" 8, "	2678 75	
12/31, 1922	22117	" 2, "	9 84	
"	22119	" 5, "	24410 85	
"	22120	" 3, "	1875 00	
"	22121	" 5, "	8202 84	
"	22123	" 4, "	554 92	
"	22124	" 8, "	42 66	
"	22125	" 5, "	187 02	
"	22126	" 7, "	1982 85	79311 01

Difference 316401 61

Add: Deposit of 12/31, 1922 and credited by Bank 1/2, 1923 traced to January bank statement 14631 06

Balance, December 31, 1922, per Cheque Book 331032 67 (To H)

* Traced to Company's November Bank reconciliation – looked up cheque stubs in Cheque Book – said to be O.K. by Treasurer and Comptroller.

— A.H.A.

Bank University Trust Co., Philadelphia

IF THIS FORM IS NOT USED IN REPLYING PLEASE MENTION REFERENCE J. H. J.

H^{2a}

BANK CERTIFICATE

Messrs. Scrooge & Marlowe,
20 South Broad Street,
Philadelphia, Pennsylvania.

Dear Sirs:

We hereby certify that the balance(s) on our books to the **credit** of The North American Shipbuilding Company, Philadelphia - - - - - - at the close of business December 31, 1922 - - - - - - - - - - - - - 192 - - was ~~were~~ Three Hundred Ninety-five Thousand Seven Hundred Twelve Dollars. Sixty-two Cents ($395,712.62). To H^2

Yours very truly,

January 6, 1923. 192

(Signed) NICHOLAS NICKLEBY .
~~Cashier~~
Treasurer

NOTE:—If the depositor has more than one account with you, please indicate the balances on the several accounts.

The North American Shipbuilding Company H3

Petty Cash

Dec. 31, 1922.

Counted at 9:15 a.m. January 2, 1923 — in presence of David Copperfield, Cashier. — A.H.A.

Currency			611 00
Coin			20 22
Cheques:			
J. A. Risley – 12/31, 1922		100 00	
Marjorie Prescott – 12/31		20 00	
David Copperfield – 12/31		150 00	270 00
Vouchers:			
Traveling – O. Twist	12/31, 1922	80 00	
Postage	12/31, 1922	3 00	
Car fares	12/31, 1922	1 00	
Rubber stamps	12/31, 1922	1 50	
Graph paper	12/31, 1922	5 00	
Drinking cups	12/31, 1922	8 28 T.B.1	98 78
Balance, per Gen'l Ledger, Dec. 31, 1922			1000 00 To H

Petty Cash kept under imprest method, but no petty cash book kept.

All cheques O.K.'d by Adam Bede, Treasurer.

All vouchers for $50.00 or more approved by Felix Holt, Comptroller, or by Treasurer. Vouchers for $5.00 and less than $50.00 are approved at once and individually by the Office Manager or by the Comptroller or Treasurer, while smaller amounts may be approved temporarily by the Cashier (though ultimately by Office Manager, Comptroller, or Treasurer).

The North American Shipbuilding Company. H4

Cash

Dec. 31, 1922.

Memorandum of Work Done.

Disbursements:

All cheques paid during December by the banks were produced to us, and the perforations were examined to ascertain that all of these cheques had actually gone through the banks during December. The paid cheques were then called into the Cash Book and the amounts were ticked in blue pencil, thus ĸ; the unchecked items in the Cash Book were then marked with red pencil, thus ĸ. and were checked to the lists of outstanding cheques. All entries of the month were carefully scrutinized.

The November bank reconciliations, as prepared by the client, were then obtained and all o/s cheques paid in December were ticked (✓) off. The unpaid items were then traced to the December list of outstandings.

All cheques drawn prior to December 31, 1922, and paid by the banks in January, 1923, were traced to the list of outstandings as of December 31st, and the date of payment inserted after each.

The cash book footings for the month of December were verified (from the dollar column), and the totals of all columns were checked from the cash book into the General Ledger accounts.

Special care was taken to see that no cheques for cash purposes were drawn at the close of the period and entered into the cash book for 1923.

Receipts:

All duplicate deposit slips for the period

The North American Shipbuilding Company.

H5

Cash

Dec. 31, 1922.

Memorandum of Work Done

(Continued)

Receipts (continued):

from December 15th to December 31st were produced to us and the footings thereof were verified.

All credits on bank statements during this period were then traced via these duplicate deposit slips to the cash receipts book, and the deposits were compared in detail with the cash receipts for corresponding days.

The Cash Book receipts were footed for the month of December (from cents column), and the totals of all columns were checked from the cash book into the General Ledger accounts.

Deposits in transit at December 31, 1922, were traced to the January, 1923 bank statement and the date on which they were credited by the bank was inserted.

General:

A somewhat careful study was made of the accounting methods in force for recording cash, and it was found that the work of handling and recording the cash was quite broadly distributed. Two or three persons are necessary for receiving and recording the receipt of cash, and a similar number are involved in its disbursement.

All cheques must bear two signatures.

— A.H.A.

The North American Shipbuilding Company. J

Deferred Charges to Operations — Dec. 31, 1922

Summary.

Balance, Unexpired Insurance Premiums	J1	5222780
" Unamortized Bond Discount	J2	~~~
Total, December 31, 1922 —		5222780
		To B/S

See supporting exhibits
for all details. — J.H.J.

The North American Shipbuilding Company. J1

Deferred Charges to Operations – Dec. 31, 1922.

Fire and Misc. Ins. Prepaid

Unexpired Premiums 12/31, 1921, per Auditor's papers		220227.80
Add: Premiums Paid during 1922:		
Fire insurance	42643.80	
Boiler "	1760.12	
Liability "	72481.78	
Miscellaneous	3715.45	120601.15
Together		340828.95
Deduct:		
Charges to Operations of Year:		
Fire insurance @ $6900.00 monthly	82800.00	
Boiler " @ 1050.00 "	12600.00	
Liability insurance – total	165783.20	
Miscellaneous	8124.50	
Policies cancelled and premium returned	19293.45	288601.15
Unexpired Premiums, Dec. 31, 1922, per Agent's Certificate J1a		52227.80 To J

All vouchers of the year, both for additional premiums paid and for the monthly charges to operations were inspected. Notices of policies cancelled and premiums returned were also seen, and the cash received was traced into the Cash Book and Bank.

All policies are in the possession of the Insurance Broker, and a certificate was received from him regarding unexpired premiums. J1a

— J.H.J.

J 1a

H U M P H R E Y   C L I N K E R

Insurance Broker

Philadelphia, January 23, 1923.

Messrs. Scrooge & Marlowe, Auditors,
20 South Broad Street,
Philadelphia, Pennsylvania.

Gentlemen:-

Re. The North American Shipbuilding Company
Unexpired Insurance Premiums

In accordance with your request, dated January 20th and approved by The North American Shipbuilding Company, requesting information concerning the value of that Company's unexpired insurance premiums as of December 31, 1922, we beg to advise as follows:

Unexpired premiums -	Fire . .	$24,623.92
	Boiler .	1,922.86
	Liability	25,245.12
	Miscel. .	435.90
Total Unexpired Insurance Premium		$52,227.80- To J1

Yours very truly,

(Signed) HUMPHREY CLINKER

We ascertained by telephone that approximately $6,200,000. of insurance is carried on property and plant, and $14,000,000. at present on vessels in progress.
—J.H.J.

The North American Shipbuilding Company. J2

Deferred Charges to Operations Dec. 31, 1922.

Unamortized Bond Discount.

Total discount and expense on First Mtge. 6% Twenty-Year Gold Bonds, to be written off over life of issue	96428 68
Less: Written off during first nine years of bonds at $5000. per annum	45000 00
Balance, Dec. 31, 1921, per Auditor's schedules	51428 68
Add: Discount and expense on Collateral Trust 5½% Five-Year Sinking Fund Gold Notes – issued Sept. 1, 1922 @ 96% — $750,000. par @ 4% discount – (see BB²)	30000 00
Together	81428 68
Deduct: Portion charged to Operations of the Year – (see JJ⁴)	(JJ1) 10000 00
Balance of unamortized discount applicable to future periods, and written off to Surplus per resolution of Board of Directors of January 10, 1923 (T.B¹) (JJ) (MM¹)	71428 68

Note: The Tax Department of the Company keeps separate records of bond discount unamortized. — J.H.J.

Note to Reader ---- While the above treatment of unamortized bond discount is not common it is not particularly unusual for companies to write this account entirely off their books. When such action is taken this typifies the procedure to be adopted.

The North American Shipbuilding Company (AA)

Capital Stock Dec. 31, 1922.

Authorized capital stock, per Auditor's schedules, Dec. 31, 1921 — 100,000 shares @ $100.00 each (par)	Cert. AA'	10000000 00 (To B/S.)
Deduct: Unissued capital stock, per Auditor's schedule, Dec. 31, 1921 — 47,725 shares @ $100.00 each (par)		4772500 00
Capital Stock issued and outstanding as at Dec. 31, 1921, per Auditor's papers and per balance sheet	Cert. AA'	5227500 00 (To B/S.)

No changes during year — the above in accordance with General Ledger as of December 31, 1922.

— J.H.J.

AA'

U N I V E R S I T Y   T R U S T   C O M P A N Y

Philadelphia, Pennsylvania.

January 28, 1923.

Messrs. Scrooge & Marlowe, Auditors,
20 South Broad Street,
Philadelphia, Pennsylvania.

Gentlemen:-

Re. The North American Shipbuilding Company
Capital Stock

In accordance with your request dated January 20th and approved by The North American Shipbuilding Company, requesting information concerning the above issue of Capital Stock as of December 31, 1922, we beg to advise as follows:-

Amount of stock authorized - 100,000 shares of $100 each . .	$10,000,000	To AA
Amount of stock issued and outstanding - 52,275 shares . .	5,227,500	To AA

Yours very truly,

(Signed) DON QUIXOTE

Registrar.

The North American Shipbuilding Company. BB

Funded and Secured Debt – Dec. 31, 1922.

Summary.

Description	Authorized and Issued	Out-standing	Accrued Interest
First Mtge. 6% Twenty-year Gold Bonds, due Dec. 31, 1932	BB1 225000000	BB1 163500000	None
Collateral Trust 5½% Five-year Sinking Fund Gold Notes, due September 1, 1927	BB2 75000000	BB2 75000000	BB2 1375000
Totals	4 300000000 To B/S	4 238500000 To B/S	4 1375000 To EE

— J.H.J.

The North American Shipbuilding Company BB'

First Mtge. 6% 20-yr. Gold Bonds — Dec. 31, 1922.

Bonds Issued.

Balance, Dec. 31, 1921, per Auditor's schedules BB'a		225000000 To BB

No change during the year in the authorization or amount of bonds issued.

Bonds Redeemed.

Balance, Dec. 31, 1921, per Auditor's schedules	48800000	
Add: Redeemed during Year 1922 B	12300000	
Total Redeemed, Dec. 31, 1922 To B/S.	61100000	
Add: Bonds in possession of Treasury To B/S.	400000	61500000

Balance of Bonds Outstanding in the Hands of Public, Dec. 31, 1922 Cert. BB'a	163500000 To BB.

Interest on above bonds payable June 30th and December 31st. Cash for interest coupons due and payable Dec. 31, 1922, paid in full on December 30th to Trustee under Mortgage Deed. — J.H.J.

BB[1a]

WASHINGTON TRUST COMPANY

Philadelphia, Pennsylvania.

January 25, 1923.

Re. The North American Shipbuilding Company
First Mortgage 6% Twenty-Year Gold Bonds

Messrs. Scrooge & Marlowe, Auditors,
20 South Broad Street,
Philadelphia, Pennsylvania.

Gentlemen:-

Replying to your letter dated January 20th, and approved by The North American Shipbuilding Company, requesting information concerning the above issue of bonds as of December 31, 1922, we beg to advise as follows:-

1.	Amount of bonds issued	$2,250,000.00-	To BB[1]
2.	Amount of bonds outstanding ($2,000.00 (par) called and not paid)	$1,639,000.00-	To BB[1] *
3.	Amount of bonds purchased for sinking fund	None	
4.	Cash in Sinking Fund account	$ 76,094.13	To B
5.	Cash in redemption account	$ 2,000.00	To B
6.	Cash in coupon account	$ 3,237.75	

Yours very truly,

(Signed) TOM JONES

Manager, Corporate Trust Department.

*Includes the $4000.(par) held in Treasury.
— J.H.J.

The North American Shipbuilding Company BB2

Collateral Trust 5 1/2 % Five-year Gold Notes - Dec. 31, 1922.

Bonds issued and outstanding under date of September 1, 1922 - (Cert. BB2a) 750000 00 (To BB)

No change since date of issue.

See Minutes - schedule (MM) These bonds were issued to furnish funds to acquire a portion of the capital stocks of certain associated corporations. See Investment schedule (C) and Indenture of Trust.

Interest on these bonds is payable February 28 and August 31st. The interest is accrued for four months at 5 1/2 % = $13,750.00 (To EE) The amount shown in the Company's balance sheet is therefore slightly incorrect, but it is not of sufficient importance to change the balance sheet.

— J.H.G.

Note to Reader ---- In practice a copy of the Indenture of Trust would be obtained from the client and would be made a part of the working papers --- either of the current working papers or, more properly, of the "permanent file" working papers.

BB2a

UNIVERSITY TRUST COMPANY

Philadelphia, Pennsylvania.

January 23, 1923.

Re. The North American Shipbuilding Company, Collateral Trust 5 1/2% Five-Year Sinking Fund Gold Notes

Messrs. Scrooge & Marlowe, Auditors,
20 South Broad Street,
Philadelphia, Pennsylvania.

Gentlemen:-

In accordance with your request dated January 20th, and approved by The North American Shipbuilding Company, requesting information concerning the above issue of bonds as of December 31, 1922, we beg to advise as follows:-

1. Amount of bonds issued — $750,000.00
2. Amount of bonds outstanding — $750,000.00 — To BB2
3. Amount of bonds purchased for Sinking Fund — None
4. Cash in Sinking Fund account — None
5. Amount of collateral held: — To C1
   - 6,000 shares National Dry Dock Co. - common
   - 2,000 " Turbine Mfg. Co. - common
   - 1,250 " Virginia Coal, Iron and Coke Co. - common
   - 450 " Consolidated Gas, Electric Light and Power Co. - common

These shares are in each case of $100 par value, are made out in the name of The North American Shipbuilding Company, and are accompanied by power of attorney in favor of the Trustee under the Deed of Trust.

Yours very truly,

(Signed) NICHOLAS NICKLEBY

Treasurer.

The North American Shipbuilding Company. **CC**

Notes Payable Dec. 31, 1922

Accrued Interest.

Name of Payee	Date of note	Due date	Net Amount	How verified	Rate of interest	Interest paid to	Days to accrue	Amount	Remarks —
Washington Trust Co.	5/12, 1922	Demand	10000000	Cert. CC'	6%	Nov. 12"	49	81667	No collateral held.
Washington Trust Co.	10/31, 1922	Demand	15000000	Cert. CC'	5½%	Dec. 31"	None	None	No collateral held.
Totals			25000000 To B/S.					81667 To DD	

Note to Reader ---- It is always preferable, and is particularly desirable in the case of small concerns where the system of internal check is not highly developed, that all certificates or letters of verification regarding cash balances, special funds on deposit with trustees, outstanding notes payable, funded indebtedness, capital stock, etc., etc., should be obtained on the request of and should be sent directly to the auditor (such requests should ordinarily be OK'd by the client). In the case of recurring balance sheet audits of large organizations, where the system of internal check is highly developed, it is somewhat common for the client, with or without instructions from the auditor, to obtain in advance all these letters of verification. This is of quite material assistance in the performance of the audit, for where plants and bank accounts are at a number of places or are scattered over the entire country it eliminates all delays incident to obtaining the certificates --- ordinarily the auditor will receive the original letter for filing in his working papers.

The letter of verification for notes payable (schedule CC-1 attached) is typical of a letter of verification obtained in advance by the client, the original letter being given to the auditor.

The outstanding notes as of Dec. 31, 1922, were listed from the notes payable register, together with detailed information concerning each, and the total of the net amount column was agreed with the general ledger trial balance figure. The certificate of the holder is attached hereto — CC'. — J.F.C.

CC¹

WASHINGTON TRUST COMPANY

Philadelphia, Pennsylvania.

January 5, 1923.

Re. The North American Shipbuilding Company
Notes Payable

Adam Bede, Esq., Treasurer,
The American Shipbuilding Company,
Philadelphia, Pennsylvania.

Dear Sir:-

Replying to letter received from your Company and dated December 20th, requesting information (in triplicate) concerning notes held by us of your Company as of December 31, 1922, we beg to advise as follows:-

Unsecured note dated May 12, 1922, payable to us, on demand, \$100,000.00. Interest rate 6% per annum; interest paid to and including November 12th. — To CC

Unsecured note dated October 31, 1922, payable to us, on demand, \$150,000.00. Interest rate 5½% per annum; interest paid to and including December 31st. — To CC

We hold no other obligations of your Company, and we have no securities or other collateral in our possession.

Yours very truly,

(Signed) SILAS MARNER

Treasurer.

The North American Shipbuilding Company DD

Accounts Payable – Summary –

Dec. 31, 1921.			Dec. 31, 1922.
	General Ledger balance	DD[1]	122676090
	Add: Accounts Payable, debit balances	To E	95835
	Total Accounts Payable, credit balances		122771925
	Accounts Receivable, credit balances	E	12350
	Accrued Int. – Notes Payable	CC	81667
	Provision for Unclaimed Wages	DD[2]	234176
	Provision for Federal Taxes	DD[3]	500000
	Total, Dec. 31, 1922 –		123600118 To B/S

– J.F.C.

The North American Shipbuilding Company. **DD'**

Accounts Payable — Dec. 31, 1922.

Name	Balance Debit	Balance Credit
Abell and Westlake Company		570363
Argo Chain Company		1706082
Babcock Lumber Company		4188126
Balfour-Stockwell Company		1241765
Bethlehem Steel Corporation		13796243
Bradford Gear Works		3419187
Canton Mchy and Supply Company		60182
Carnegie Steel Company		31341249
Chesapeake Pneumatic Tool Co.		6079
Crescent Supply Co., Inc.		186496
Cutler, Jones & Company	81964	
Diamond Crucible Company		1596245
Eastern Welding Company		1201864
Federal Foundry Machine Company		4762019
General Electric Company		2910122
Greene Chemical Company	13871	
Hersey Rubber Mfg. Co., Inc.		489642
International Boiler Company		2621834
Keystone Machine Company		1700193
Nassau Marine Lamp Company		2981861
Penna. Chemical Corp.		981604
Pittsburgh Steel Products Company		9186123
Reading Malleable Iron Works		2584968
Sanders, Son and Company		3819602
Sperry Gyroscope Company		3520000
Star Brass Works, Inc.		2251184
Taxes (property)		8865690
United States Rubber Company		168329
Wages "C"		428360
Wages-General		146093
Wages-Hull		1485211
Wages-Engineering		381629
Western Electric Company		2748795
Western Union Telegraph Co.		28362
Yorkshire Mfg. Company		11290176
Zimmermann Mfg. Co., Inc.		106247
	95835	122771925
Deduct debit balances		95835
Per General Ledger		122676090

(To DD)

Checked to subsidiary ledger and footings verified. — J.F.C.

DD2

The North American Shipbuilding Company
Provision for Unclaimed Wages — Dec. 31, 1922.

Balance, Dec. 31, 1921, per Auditor's papers	368347
Add: Unclaimed and credited during year	123129
Together	491476
Deduct: Wages paid and charged off during the year	257300
Balance, Dec. 31, 1922	234176 (To DD)

Uncalled-for pay envelopes are held by the Pay-roll Department for one full week after date when payment is due, when the funds are deposited to the credit of this account — the envelopes being turned over to Office Manager. When an employee calls for back pay he must get an identification card from his Foreman which he takes to the Office Manager for approval, and then he goes to the Cashier for payment. The voucher then goes through the regular Petty Cash routine, and is eventually charged to this account. A notation is made on the pay-roll envelope that payment has been made, and the number of the P.C. Voucher is given.

Checked in detail to cash and pay-roll records all entries to the account for December. Also totaled all envelopes in the possession of the Office Manager to agree them with the Ledger account balance. Office Manager states that lack of employment and hard times has reduced the balance in this account during the year to a minimum — employees watch very closely any wages due. — J.C.

The North American Shipbuilding Company. DD3

Provision for Taxes — Dec. 31, 1922

Description	Balance Dec. 31, 1921.	Provision during 1922.	Paid during 1922.	Balance Dec. 31, 1922.
Federal Taxes	12896 13	None	7896 13	5000 00 (To DD)

Vouchers were seen for the taxes paid during the year. Due to net loss of the current year the Company has made no additional provision for 1922 — the above balance will approximately take care of the Capital Stock Tax due the following July 31st. — J.F.C

The North American Shipbuilding Company.

Liabilities of 1922 taken up in the Accounts in 1923.

DD4

Voucher No.	Name of Creditor	Total Amount	Date Goods received or Expenses incurred	Discussed with Comptroller	Inventory	Property & Plant Account	Property & Plant Amount	Expense Accounts Account	Expense Accounts Amount
1007	Star Brass Works, Inc.	1146 92	Dec. 22nd	✓	1146 92				
1023	Western Union T. Co.	368 40	December	✓				Gen'l Admin. Exp.	368 40
1029	International Boiler Company	1364 19	Dec. 4th	✓		Power Plant Equipt.	1364 19		
1033	Green Chemical Company	284 66	Dec. 28th	✓	284 66				
1059	Crescent Supply Company	108 62	December	✓				Gen'l Admin. Exp.	108 62
2017	Sanders, Son & Company	216 42	December	✓				" " "	216 42
		3489 21			1431 58		1364 19		693 44

Inspected 1923 vouchers on 2/6, 1923 and found only comparatively small amounts applicable to the operations of 1922. Expense accounts were scrutinized to see if from periodic charges any subsequent bills should be expected. Special attention was given to bills which might have represented fees, services, etc., such as legal, appraisal, audit, engineering, etc. All charges through the cash book to general ledger accounts after the close of the year were scrutinized to see if any payments were applicable to the period under audit. Receiving slips and records were scrutinized for the last two weeks of 1922, and all large amounts were traced to vouchers to see if they were included in the 1922 operations.

No change made in Company's balance sheet. – J.C.

Note to Reader ---- The auditor will be governed, in the case of liabilities not taken up in the accounts in the year to which they are applicable, by the comparative amount of such items. The total shown above is less than one-third of one per cent. of the Company's accounts payable (schedule DD-1), and would have no effect upon the relative accuracy of the balance sheet. In such cases experience and judgment on the part of the auditor are prime requisites.

DD[5]

THE NORTH AMERICAN SHIPBUILDING COMPANY

Certificate of Liabilities

January 30, 1923.

We hereby certify that to the best of our knowledge and belief all known liabilities relating to the period up to and including December 31, 1922, in respect to borrowed money, materials and supplies in transit at December 31st, accrued liabilities for taxes, legal fees, damages, etc., have been brought into the books or have been provided for as of that date. We also certify that no liability, direct or contingent, exists in respect to lawsuits, contracts, or otherwise, except such as have been provided for or were brought to the attention of the auditor.

(Signed) Felix Holt, Comptroller.
Oliver Twist, Secretary.

The North American Shipbuilding Company EE

Bond Interest Accrued — Dec. 31, 1922

Balance, Dec. 31, 1922, per General Ledger BB[2] 1344637
To B/S.

Bond interest is accrued for four months (see BB[2]) on the Collateral Trust 5 1/2 % Five-Year Sinking Fund Gold Notes, and amounts to \$13,750.00 BB Company's Balance Sheet not changed. — J.H.J.

Note to Reader ---- As in the case of schedule DD[4] the comparatively small error referred to above does not appreciably effect the relative accuracy of the balance sheet, and the Company's balance sheet probably would not be altered because of it.

The beginner must not, however, gain the impression that accuracy is not necessary --- nothing could be farther from the truth. But when at best some error may exist, because of the impossibility of correct physical measurement of the inventory or because it is impossible for the auditor to determine the correctness of each individual charge to the property and plant accounts, judgment must be used in altering the client's statements on account of comparatively small and unimportant errors.

The North American Shipbuilding Company FF

Reserve for Bad Debts – Dec. 31, 1922

Balance, Dec. 31, 1921, per Auditor's schedules		1936106
Add: Provision for Year	JJ6	396744
		2332850
Less: Moses & Brown account written off		109075
Balance, Dec. 31, 1922, per General Ledger		2223775
		To E

The provision of the year represents, in this case, specific accounts or amounts for which the provision was made.

It is made up as follows:

Brosius & Wilcox Co. E1	201669	
Moses & Brown	109075	
Wright Foundry Co. E1	86000	396744

All Journal vouchers inspected.

The total reserve for bad debts is equivalent, approximately, to two per cent of the accounts receivable outstanding as of December 31, 1922. This is considered, on the basis of past experience, a sufficient reserve to be kept. – J.H.J.

The North American Shipbuilding Company. GG

Reserve for Depreciation — Dec. 31, 1922.

Balance, Dec. 31, 1921, per Auditor's working papers		1614957.17
Add: Provision for current year	JJ[1]	390872.19
Together		2005829.36
Deduct: Deprec. provided for, on plant, dismantled & sold	A[5]	38222.56
Balance, Dec. 31, 1922, per General Ledger		1967606.80
		To B/S.

The provision of the year represents varying rates on the value of property & plant at the beginning of the period under audit.

Depreciation charge for 1921 was \$380,140.96, while for 1920 it was \$451,280.34, or at a slightly higher rate. — J.H.J.

Note to Reader ---- A further exhibit might support the "provision for current year" above, showing in detail the various assets to be depreciated, the value for each on which the depreciation was computed, the rate of depreciation used for each, and the year's depreciation charge on account of each. Where a composite rate is used, the result should agree approximately with what it would be if separate rates were applied to the various assets.

The North American Shipbuilding Company HH

Reserve for Contingencies — Dec. 31, 1922.

Balance, Dec. 31, 1921, per Auditor's working papers		330589 16
Add: Special appropriation from surplus MM¹-JJ TB.	37500 00	
Charged to Property and Plant for 1921 operating expenses capitalized *	86 48	37586 48
Together		368175 64
Deduct: Miscellaneous credits to Property and Plant accounts A6		5448 63
Balance, Dec. 31, 1922, per General Ledger		362727 01
		To B/S.

*Amounts of this kind, which should rightly be credited back to the Indirect Expenses, are credited instead to this account in order not to destroy the statistical accuracy of the cost records. — J.H.J.

Note to Reader ---- It is assumed that the $37,500.00 especially appropriated from surplus is not to provide for known contingencies, but to serve merely as an additional emergency reserve. It is therefore appropriated from surplus rather than charged against current income.

The North American Shipbuilding Company. JJ

Surplus — Dec. 31, 1922.

Balance, Dec. 31, 1921, per Auditor's schedules (To B/S.)			2056242 69
Deduct: Net Loss for Year (JJ1)	213915 01		
Special Appropriation for Contingencies - Jo. Vo. #12099 (To HH) (MM1)	37500 00		251415 01
Balance of Surplus, before Dividends and other Special Charges			1804827 68
Deduct: Dividends declared and paid:			
2% Payable Mch. 1, 1922 (MM)	104550 00		
2% " June 1, 1922 (MM)	104550 00		
2% " Sept. 1, 1922 (MM1)	104550 00		
2% " Dec. 1, 1922 (MM1)	104550 00	418200 00	
Bond discount applicable to succeeding periods per resolution of Directors (T.B') (J2) (MM1)		71428 68	489628 68
Balance, December 31, 1922, per General Ledger			4 1315199 00 (To B/S)

— J.H.J.

The North American Shipbuilding Company. JJ1

Income Statement for Year ending Dec. 31, 1922.

Gross Sales, less Returns, Allowances, Discounts, and Outward Freight	JJ2	11361116 91		
Less: Mfg. Cost and Operating Expenses, exclusive of depreciation	JJ2	10036342 91		
Depreciation of manufacturing plant	GG and JJ5	390872 19		
Loss on Plant dismantled and sold	A5	9127 81	10436342 91	
Gross Profit				924774 00
Deduct: Adm., Selling and General Expenses	JJ5	906523 52		
Taxes	JJ5	165196 00		1071719 52
Operating Loss				146945 52
Deduct: Non-operating Income:				
Dividends on Investments	JJ2	41337 50		
Interest on Deposits	JJ2	21204 22		
Interest on Notes Receivable	JJ2	1484 10		
Miscellaneous, including profit on life insurance policy	JJ2	8711 55		72737 37
				74208 15
Add: Interest Charges:				
Bond Interest	JJ5	113286 37		
Bond Discount (proportion for Year)	J2-JJ5	10000 00		
Interest on Notes Payable	JJ5	16420 49		139706 86
Net Loss for Year ending Dec. 31, 1922				213915 01

To JJ

— J.H.J.

JJ2

The North American Shipbuilding Company.

Analysis of Profit and Loss Ledger Accounts — Credits — Year ending December 31, 1923.

Month	Merchandise Sales — Sales: Vessels	Sales: Other	Cost of Sales: Vessels Dr.	Cost of Sales: Other Dr.	Gross Profit	Dividends on Investments	Interest on Deposits	Interest on Notes Receivable	Miscellaneous Income: Amount	Remarks
January	716245 96	51208 19	706405 19	50835 43	10213 53	1575 00	1231 36	—	(B) 90 38	Profit on bonds purchased.
February	803941 54	102345 67	740612 18	98911 02	66764 01	—	1014 17	—	—	
March	851209 14	12386 95	738604 92	12841 84	112149 33	—	1471 88	83 32	—	
April	863411 28	68416 83	701209 62	67209 62	163408 87	—	2016 63	—	—	
May	845212 33	29413 83	753776 99	31090 11	89759 06	—	2166 32	37 48	—	
June	* 811486 19	⊙ 362407 89	* 803111 27	⊙ 57267 55	313515 26	—	978 18	81 40	—	
July	865478 05	96118 44	645819 62	91676 59	224100 28	1575 00	1343 15	136 83	(B) 37 77	Profit on bonds purchased.
August	793616 22	118607 01	750981 74	113118 62	48122 87	—	1278 91	—	—	
September	756212 97	46507 80	738665 83	45112 06	18942 88	16000 00	2662 74	96 78	—	
October	816983 29	77194 67	714219 26	80387 25	99571 45	—	1988 38	133 39	8583 40	Difference between face of $25,000. life insurance policy on Vice-President and cash surrender value of the policy. — Carried previously in Misc. Inventories.
November	* 1193849 42	87200 58	* 1139107 81	84066 39	57875 80	6187 50	2090 34	85 18	—	
December	* 865281 44	* 126381 22	* 749281 74	* 122030 26	120350 66	16000 00	** 2962 16	(F) 829 72	—	
	D7	JJ4	JJ3	JJ4						
	10182927 83	1178189 08	9181796 17	854546 74	1324774 00 (*)	41337 50	21204 22	1484 10	8711 55	
	To JJ1	11361116 91	To JJ1	10036342 91	To JJ1	To JJ1	To JJ1	To JJ1	To JJ1	

(*) Profit on Vessels — per JJ3   1001131 66
Profit on Miscel. Sales — per JJ4   323642 34
  1324774 00

Dividends verified from Commercial and Financial Chronicle —
- Consol. Gas, Elec. Lt. and Power Co. Common — 450 sh. — 3½ % Jan. and July.
- National Dry Dock Co. — Common — 6000 sh. — 2 % qu. Sept. and Dec.
- Turbine Mfg. Co. — Common — 2000 sh. — 2 % qu. Sept. and Dec.
- Virginia Coal, Iron and Coke Co. — Common — 1250 sh. special div. $4.95 Nov.

Cost of Sales is before dep. of Mfg. plant and loss on plant dismantled and sold.
Proceeds of insurance policy traced into cash-book and bank. —
Interest on deposits tested to bank statements. —
⊙ Includes sale of obsolete and surplus materials. — Tested —
* Billings and cost charges thoroughly tested. —
** This amount includes not only the December bank interest but also the interest on Liberty bonds as of December 15th. less the interest accrued at date of purchase. —

— J.H.J.

Note to Reader ---- There are companies that close out monthly all of their expense accounts, the monthly closing being made either into Profit & Loss or into a general account. It is assumed that The American Shipbuilding Company follows this practice, which explains the analysis of all income and expense accounts by months. This monthly analysis is largely useless except for sales, purchases, payrolls, and for the administrative, selling and general expenses. It is prepared here only for convenience. Monthly totals should appear in the working papers only (a) when they must be so accumulated because of the method of bookkeeping in use, and (b) when such items as sales, purchases, etc., referred to above indicate the trend of the business. The latter is much the more important of the two.

"Sales" in the case of vessels refers merely to the billings.

The North American Shipbuilding Company - JJ3

Summary of Merchandise Sales and Cost of Sales - Vessels - Dec. 31, 1922.

Billings, or Selling Price (net) - (D7):-			
Battleship - U.S. Government			38050567
Battle cruiser - " "			49157772
Submarines (4) " "			10234348
Steamers (7) - private companies			68161028 9
Tankers (2) - " "			18951558 7
Tugs (5) - " "			35428847
Small boats - - " "			14295373
Total billings, per (D7)			1018292783
Costs taken up in Mdse. Sales:-			
Costs incurred in 1922 - (D7)			8 79945143
Add: Work in Progress inventory, Dec. 31, 1921, per Auditor's schedules, and per comparative Balance Sheets attached:			
Total costs incurred to Dec. 31, 1921 - see (D7)	2545248407		
Less: Bills Rendered to 12/31/1921 (D7) 2656267215			
Deduct: Partial Profits taken up (D7) 224580075	2431687140		
Labor, Materials, and Expense, less bills rendered and partial profits on contracts, Dec. 31, 1921		113561267	
Add: Suspended Cost and Operating Expense balances, Dec. 31, 1921		6619226	
Inventory, Dec. 31, 1921 (To B/S)			120180493
			10 00125636
Deduct: Work in Progress, Dec. 31, 1922 - - (D)			81946019
Costs taken up in Mdse. Sales account during year ending Dec. 31, 1922 - - (JJ2)			918179617

Summary

Total billings, or sales -	(JJ2)	1018292783
Less: Costs taken up during year -	(JJ2)	918179617
Profits taken up during Year ending December 31, 1922 -	(JJ2)	100113166

— A.H.A.

The North American Shipbuilding Company (JJ4)

Summary of Merchandise Sales — Dec. 31, 1922.
Materials and Miscellaneous.

Description	Sales	Cost, or Book Value	Gross Profit
Vessel Repairs	650683 64	555108 92	95574 72
Marine Auxiliaries	14569 28	12826 94	1742 34
Engines (oil reciprocating turbines)	92829 29	86781 60	6047 69
Oil Burning Systems	50061 07	40238 21	9822 86
Drop Forgings	2422 02	2281 93	140 09
Iron Castings	1942 81	1491 01	451 80
Brass Castings	5904 28	7813 92	1909 64
Boilers and Condensers	9730 58	7667 10	2063 48
Tug Boat Services	3525 36	4597 57	1072 21
Valves — steel	1085 30	854 59	230 71
" — iron	390 22	350 01	40 21
" — brass	2381 79	2863 96	482 17
Bolts, nuts, etc. — steel	127 62	167 80	40 18
" " " — brass	11 14	16 24	5 10
Pipe fittings — steel	2946 17	3047 00	100 83
" " — iron	1241 52	1411 71	170 19
" " — brass	1960 65	1839 17	121 48
Universal joints	2879 50	2679 47	200 03
Air Ports and Deck Lights	1209 09	1289 69	80 60
Electrical Fittings	2114 24	2014 15	100 09
Scrap	70773 65	61524 51	9249 14
Surplus Stock — miscellaneous *	259399 86	57681 24	201718 62
Totals	1178189 08	854546 74	323642 34
	To JJ2	To JJ2	To JJ2

* Book value written down very considerably at previous inventory taking.
The above summarized from the sales records, and from the cost and stores ledgers.
— J.F.C.

The North American Shipbuilding Company. JJ5

Analysis of Profit and Loss "Debit" Accounts - Dec. 31, 1922.

Month 1922	Admin., Selling and General Expenses	Property and Excise Taxes	Bond Interest	Interest on Notes Payable	Bond Discount	Depreciation
January	7021996	—	847500	—	83333	3257268
February	8632471	—	847500	133333	83333	3257268
March	7534314	* 5865600	847500	151666	83334	3257268
April	8555724	5011362	847500	168441	83333	3257268
May	7373691	—	847500	95833	83333	3257268
June	7882842	—	847500	133333	83334	3257268
July	7105014	654000	816500	171980	83333	3257268
August	7491228	—	816500	181462	83333	3257268
September	6877632	—	1152659	168962	83334	3257268
October	6851247	4988638	1152659	161029	83333	3257268
November	7371645	—	1152659	133564	83333	3257268
December	7954548	—	1152660	142446	83334	3257271
	JJ6		BB		J2	GG
	90652352	16519600	11328637	1642049	1000000	39087219
	To JJ1	To JJ1	To JJ1	To JJ1	To JJ1	To JJ1

* Excise tax return must be filed within 60 days of fiscal closing, and tax paid within 30 days thereafter. Tax receipts inspected.

Tests made of bond interest and of interest on notes payable. These, and bond discount and depreciation, are charged into the accounts as approximately equal monthly amounts.

Bond interest for year computed on 6% mortgage bonds outstanding, beginning of year — $1,758,000.00. Called January 1, 1922 - $63,000.00 and July 1, 1922 - $62,000.00.

Interest on 6% mortgage bonds:

First six months $1,695,000. @ 3%	=	50,850.00
Second six months 1,633,000. @ 3%	=	48,990.00
Accrued interest on collateral trust gold notes per EE	=	13,446.37
Total bond interest for year	=	113,286.37

— J.T.C.

The North American Shipbuilding Company JJ6

Admin., Selling and General Expenses – Dec. 31, 1922.

Comparative figures for previous period.

Dec. 31, 1921		Dec. 31, 1922
	Selling Expenses	17055587
	Provision for Bad Debts (FF)	396744
	Administrative Accounting	16347543
	Purchasing Dept. Expenses	6892486
	Traffic Dept. Expenses	3848962
	Secretary's Office	5032172
	President's Office	3221681
	New York Office Expenses	12077539
	Advertising Expenses	4281635
	General Office Building Expenses	8590831
	Real Estate and Insurance	2577081
	General and Miscel. Expenses	10330091
	Total	90652352

To JJ5

– J.H.C.

Note to Reader ---- Each of the items in this exhibit would probably be supported by further detail, probably in the form of a columnar schedule --- the descriptions appearing as the headings of the columns, while the above items of expense would be listed to the left of the exhibit. Each expense might also be analyzed by months, in order that any unusually large expenditure in any month may be fully explained. Variations of any magnitude from month to month should be thoroughly investigated.

The North American Shipbuilding Company (MM)

Minutes—Board of Directors— Year 1922.

Quarterly Meeting— 2/1, 1922:

(JJ) Resolution authorizing 2% dividend on outstanding capital stock, payable March 1, 1922 to stockholders of record at 3:00 p.m., February 18, 1922.

(A^2) Resolution authorizing the purchase of concrete pier No. 7, at cost not to exceed $70,000. President and secretary authorized to make purchase, and sign all papers necessary.

Special Meeting—3/17, 1922:

(BB^2) Resolution authorizing the issue of $750,000. five-year collateral trust 5½% sinking fund gold notes, dated September 1, 1922, and payable September 1, 1927. Bonds to be issued in denominations of $1000., coupons attached, interest payable semi-annually, redeemable as a whole at $100.00 (100%) and accrued interest, upon 45 days' published notice. University Trust Company, Philadelphia, appointed Trustee.

(C^1) Resolution authorizing the President and Treasurer to purchase at best prices obtainable stocks of associated companies, viz.:—

6000 shares National Dry Dock Company common,
2000 shares Turbine Manufacturing Company common,
1250 shares Virginia Iron, Coal and Coke Company common.

(BB^{2a}) Resolution authorizing pledging the above stocks, and, in addition, 450 shares Consolidated Gas, Electric Light and Power Co. common as collateral for the above five-year 5½% gold notes.

Quarterly Meeting—5/1, 1922:

(JJ) Resolution authorizing 2% dividend on outstanding capital stock, payable June 1, 1922, to stockholders of record at 3:00 p.m., May 18, 1922.

Officers elected for ensuing year.

The North American Shipbuilding Company. MM'

Minutes – Board of Directors – Year 1922.
(Continued.)

Quarterly Meeting – 8/1, 1922:

JJ Resolution authorizing 2% dividend on outstanding capital stock, payable September 1, 1922, to stockholders of record at 3:00 p.m., August 18, 1922.

Special Meeting – 9/10, 1922:

Special Meeting – 10/15, 1922:

Quarterly Meeting – 11/1, 1922:

JJ Resolution authorizing 2% dividend on outstanding capital stock, payable December 1, 1922, to stockholders of record at 3:00 p.m., November 19, 1922.

Special Meeting – 1/10, 1923:

J2 JJ Resolution authorizing the Comptroller to write off to Surplus, as of December 31, 1922, the unamortized bond discount applicable to subsequent accounting periods, and amounting to $71,428.68.

JJ x HH Resolution authorizing special appropriation as of December 31, 1922, of $37,500.00 from Surplus for additional Reserve for Contingencies.

– JHJ.

The North American Shipbuilding Company. MM[2]

Minutes – Stockholders – Year 1922.

Annual Meeting – 3/12, 1922.

Directors for ensuing year elected.

Minutes of previous annual meeting read and approved as read.

Resolution approving all actions of the Directors, taken during the previous corporate year, for and in behalf of the corporation.

Adjournment.

— JHG

APPENDIX B

The schedules comprising Appendix B are of two general kinds, first, schedules varying somewhat in form from those shown in APPENDIX A but recording the same or similar information, and, secondly, schedules illustrating labor-saving devices to be used with reference to regular or recurring balance sheet audits or with reference to investigations covering probably a period of years. Opportunity is also taken to illustrate the more satisfactory kinds of working paper.

These schedules will, in addition, tend to emphasize how undesirable, if not impossible, it is for an auditor always to use schedules uniform either in form or in content (because the data to be obtained are usually far from being the same) even when the schedules refer to assets or to liabilities somewhat similar in content, and for which similar general records are kept.

The auditor should always decide first what information he desires to obtain, and should then visualize the schedule he is about to prepare to determine whether that information will be set forth clearly, yet with the expenditure of the least possible time. No schedule should be prepared until the auditor has determined definitely what purpose will be served by it. Experience alone will enable an assistant to do this most successfully, although an intelligent study of the schedules of others and of the information which is desired will be of the greatest assistance. It is for the purpose of intelligent study that these typical schedules are presented.

Note to Reader ---- This fourteen-column analysis paper is very satisfactory for use on audit engagements. It is of 28-lb. weight (per 1,000 sheets), and is a good quality ink paper. The sheets are 17 x 13 inches; no unit ruling is needed. The sheets are folded in the center, five or six sheets to the bunch. Where half-sheets only are needed the 14-column sheets may be torn in the center, yet when the full-size sheets are properly folded all exhibits will be uniform in size for binding.

Note to Reader ---- In addition to the fourteen-column analysis paper the auditor will need paper for making extended notes upon conditions found on the audit, or for drafting the report to the client when/if a detailed report is to be rendered in connection with the audit engagement. This paper is of medium grade, size $8\frac{1}{2}$ x 13 inches, and is made up in "pads" of one hundred sheets each. The size is one-half that of the fourteen-column analysis paper, and thus the sheets bind up uniformly with the other schedules.

Exhibit 3

SCROOGE & MARLOWE

FILING DEPARTMENT

No. ____________

Date...

INSTRUCTIONS RECEIVED

Matter ____________________

____

Nature of Business ____________________

Particulars of Work ____________________

____

____

____

____

Subsidiaries (if any) ____________________

____

____

Offices involved ____________________

____

Client ____________________

Fee Basis ____________________

Authority for charge to Client ____________________

____

____

Exhibit 4.

Scrooge & Marlowe
20 SOUTH BROAD STREET
Philadelphia, Penna.

WRITTEN BY

FOR ATTENTION OF

MEMORANDUM NO.

DATE

SUBJECT:

"X" Leather Company. Exhibit 5.

Program of Audit.

Instructions. Initials of assitants doing the work.

12/31, 1921. 12/31, 1922. 12/31, 1923.

Cash Book - Payments

Obtain cancelled cheques for last month of period under audit, and examine perforations to see if actually paid within that month

Compare cancelled cheques with "Bank" columns

Take list of outstanding cheques, per bank reconciliation, and compare with all unchecked items in "Bank" columns

Verify additions to dollar column

Check postings to General Ledger accounts

Compare cash payment entries with Voucher Register -- test only

Scrutinize entries in General Ledger column which are not supported by vouchers

Check off outstanding cheques, per bank reconciliation, with cancelled cheques returned from bank for following month

Investigate all outstanding cheques of long standing, and obtain satisfactory explanations of them. If possible, have such cheques cancelled, payment stopped at the bank, and new cheques issued

Cash Book - Receipts

Compare the monthly totals with the total deposits in the "Bank" columns

Compare details of daily deposits per bank column with Pass Book or with Bank Statements

Verify additions to dollar column

Check postings to General Ledger accounts

Obtain certificates from all banks

Prepare reconciliation of balance per cash book with balance per bank certificate (accepting Company's reconciliation for previous month)

Make test, per instructions of in-charge assistant, to determine that all cash received during month was entered in cash book

Note to Reader ---- This merely illustrates the form the "program of audit" ordinarily takes. Instructions similar to these given for Cash would also pertain to the voucher register, journal, petty cash, sales books, general ledger, pay rolls, inventory, accounts receivable, notes receivable, notes payable, etc. Such a program should be revised carefully each year; it serves as a permanent record which enables the auditor to attach responsibility or to give credit to assistants for all work done.

Name of Company Exhibit 6

Disposition of Profits and Change in Financial Position for the Fiscal Period ending 19 .

Resources and Funds Provided during Period:		
Net Profits, per Profit and Loss Account		$
Increases in Reserves:		
Provision for Depreciation	$	
Less: Charges against Reserve		
Other Reserves (detailed)		
Proceeds of Capital Stock Sold		
Proceeds of Bonds Sold		
Bank Loans		
Total to be accounted for		$
Disposition thereof:		
Property Expenditures during Period:		
Land and Buildings	$	
Machinery, Tools, etc.		
	$	
Funded Debt redeemed		
Bank Loans paid off		
Disbursements in Dividends		
Surplus and other adjustments, etc. (detailed)		
Total		$
Balance, being excess retained in the business as working capital, as summarized below		$

	Balances Last Year	Balances This Year	Increase or decrease (Red)
	$	$	$
Inventories			
Accounts Receivable, etc.			
Cash			
Deferred Charges			
	$	$	$
Less: Current Liabilities			
Balance, being Working Capital and increase therein	$	$	$

Note to Reader ---- This form which may be used to show the disposition of profits and change in financial condition for the fiscal year is similar in content to the form shown in Appendix A, and is merely an additional method of analyzing and presenting the information. Property Expenditures may be subdivided, if desired, between Additions and Extensions and mere renewals.

Exhibit 7.

Name of Company .

Working Balance Sheet.

Assets: Captions	Per Book figures	Adjustments Dr.	Adjustments Cr.	Final adjusted figures	Liabilities: Captions	Per Book figures	Adjustments Dr.	Adjustments Cr.	Final adjusted figures
Capital Assets:					Capital Liabilities:				
					Capital Stock				
Special Funds:					Funded Indebtedness				
Investments:					Current Liabilities:				
					Notes Payable				
Current Assets:					Accounts Payable				
Inventories					Accruals, etc.				
Accounts Receivable					Provision for Taxes				
Notes Receivable									
Marketable Securities					Sundry Reserves:				
Cash									
					Surplus:				
Deferred Charges:									

Note to Reader ---- The Working Balance Sheet may be used instead of, or in addition to the Working Trial Balance shown in the first part of Appendix A. Separate sheets may be used for assets and for liabilities if more working space is needed, although ordinarily the single double-sheet will be sufficient. Sometimes a client does not wish, for one reason or another, to record the auditor's adjustments in the books of account --- a working sheet of this general type then becomes particularly important in order to agree the final adjusted or balance sheet figures with the client's books. It is also desirable, for comparative purposes, to show the final figures for the previous period, for which purpose a column to the left of the captions may be used.

Skeleton account headings only are shown, but all asset and liability accounts which appear in the trial balance should also appear in the working balance sheet.

A working Income and Profit and Loss statement, with column headings similar to the above and including all profit and loss accounts appearing in the trial balance, would also be used.

Name of Company Exhibit 8.

Summary of Property Schedules: Year ending 19 .

Description	Property Accounts: Per Auditor's schedule last Audit	Property Accounts: Additions for year	Credits for Year: Sold, dismantled, etc.	Credits for Year: Depreciation	Gen'l Ledger balance end of period	Provision for Depreciation: Per Auditor's schedule last audit	Provision of Year: Rate %	Provision of Year: Amount	Charges against Reserve	Balance of Reserve at end of period	Property accounts net value
Land											
Buildings											
Machinery											
Factory equipment, fixtures, tools, etc.											
Trucks and automobiles											
Horses, wagons and harness											
Office furn. and fixtures											
Totals											
Property not used in business:											
Land											
Buildings											
Miscellaneous (itemized)											
Totals											
Gross Totals											

Note to Reader ---- If it is desired to show in one schedule the property accounts and the respective provisions for depreciation, this summary of property schedules may be used. The beginning figures for the property accounts and for the provisions for depreciation would be taken from the auditor's records for the previous audit. Gross additions to the property accounts for the year and likewise credits either on account of property sold and dismantled or on account of depreciation would be obtained from the various subsidiary property schedules. The general ledger balance at the end of the period for each property item should either agree or be agreed with the figures in the balance sheet.

The provision for depreciation for the year would be ascertained by an examination of the journal entries and/or the vouchers which give rise to the credits to the depreciation reserve account. It may be advisable to accumulate by means of a separate schedule the monthly provisions for depreciation, showing the property values to be depreciated, the rates used, and the amount of the provision.

The charges against the reserve for depreciation should be analyzed by comparison with the credits to the property accounts on account of property dismantled or scrapped and by giving full detail of any changes which cannot be accounted for in this manner. The credit balances of the provision for depreciation accounts at the end of the period should agree or be agreed with the general ledger trial balance and with the figures appearing in the balance sheet.

In preparing a schedule of this kind the assistant in charge ordinarily should note thereon the adequacy of the reserve for depreciation, any additional requirements which in his opinion would be necessary to provide for abandonments or dismantlements, or any journal entries necessary to adjust either the property or the reserve accounts. He should also express a general opinion as to the character of the additions to property accounts during the year, and should ordinarily comment upon the over or under expenditures on appropriations.

Exhibit 9.

Name of Company .

Summary of Inventory as at 19 .

Description	Balances per General Ledger or Cost Ledger before closing	Company's adjustments over or under (red)	As per inventory furnished Auditor for verification	Auditor's adjustments over or under (red)	Final balances per Balance Sheet	Balances per Auditor's schedules previous closing.
Finished Product (classified)						
Work in Progress (classified)						
Raw Materials						
Supplies (classified)						
Totals						

<u>Note to Reader</u> ---- This form of inventory summary will at times be preferable to that shown as schedule "D", Appendix A. The summary figures on this sheet would be supported by detailed figures, just as in the case of the schedule illustrated in Appendix A. The final balances as per the Balance Sheet and the auditor's balances as per the previous audit should be agreed with the company's general ledger balances, and any differences should be fully explained.

Name of Company ________________ Exhibit 10

Summary of Errors in Inventory at 19 .

Description	Amount on inventory	Correct amount	Add or subtract (red) to correct.
Errors in pricing schedule (listed by page number)			
Errors in footings and extensions (listed by page number)			
Errors in recapitulations (listed by page number)			
Errors in valuation due to errors in quantities (listed by page number)			

Note to Reader ---- If the aggregate errors are of comparative importance an entry should be drafted to make the correction. In case this entry is also made in the books by the company's accountant, the supporting inventory records should be correspondingly corrected.

Name of Company ______________________.

Exhibit 11.

Work in Progress — Verification of Inventory Prices as at ____________ 19 .

Inventory Sheet No.	Name of Product	Quantity	Total value				Unit value	Prices verified by			Remarks.
			Labor	Material	Overhead	Total		Comparison with shop orders (Show date of [illegible])	On basis of finished costs		
									Percentage completed	Total finished cost	

Note to Reader ---- This schedule which may be used in verifying the inventory prices of work in progress is similar in form to Schedule D-12, Appendix A.

Before beginning a schedule of this kind the junior should ask the assistant in charge what percentage of the prices appearing in the inventory are to be verified. He should then discuss with the company's office manager or with whoever may have charge of the inventory pricing the basis of pricing the inventory, in order that no time may be lost and that the verification may be made along proper lines.

In case of work in progress, if the finished price of the article is used as the basis for determining value and the percentage of completion of the work in progress is estimated it is unnecessary to attempt any division of value as between labor, materials and overhead; however, if shop orders or individual job orders are used by the company the exact cost may be obtained therefrom. If the audit began sometime after the close of the fiscal period a number of the larger job orders should be traced to completion to see if any adjustment was necessary which would affect the cost of the order as of the date of the balance sheet.

For a discussion of the verification of work in progress the reader should see chapter VI of the text.

Name of Company _______________ Exhibit 12.

Finished Stock — Verification of Inventory Prices as at _______ 19 .

Inventory Sheet No.	Name of product	Quantity	Total values: Material	Labor	Overhead	Total	Unit value	Prices verified by: Closed shop orders	Cost Ledgers	Tests of costs (give date used)	Price used for last inventories	Selling price for last sales invoices

Note to Reader ---- As in the case of exhibit No. 11 the junior should ascertain from the assistant in charge what percentage of the finished stock prices are to be verified. The junior should then ascertain from the proper official the basis of pricing the inventory and should make a general inspection of the records sufficient to satisfy himself as to the accuracy of the pricing. If a general inspection of shop orders has been made in connection with the work in progress inventory it will be necessary only to determine the effect of any comparatively large errors upon the finished stock inventory, making a full explanatory note for the information of the in-charge assistant.

Exhibit 13.

192

GENTLEMEN:

Our Auditors, Messrs. Scrooge & Marlowe, 20 South Broad Street, Philadelphia, Penna., desire a certificate as to the amount on deposit with you at the close of business on 192 , and we shall be obliged if you will fill in attached form and mail it to them direct.

Please also furnish Messrs. Scrooge & Marlowe with full particulars of any loans or advances you may have made to us that were unpaid on the above date, and also any items upon which we were contingently liable.

Yours very truly,

DETACH AND MAIL DIRECT TO SCROOGE & MARLOWE, IN ENCLOSED ENVELOPE

Bank

IF THIS FORM IS NOT USED IN REPLYING PLEASE MENTION REFERENCE

BANK CERTIFICATE

MESSRS. SCROOGE & MARLOWE,
20 South Broad Street, Philadelphia, Penna.

Gentlemen:

We hereby certify that the balance(s) on our books to the credit of

at the close of business 192 was / were

Yours very truly,

192

Cashier / Treasurer

NOTE:—If the depositor has more than one account with you, please indicate the balances on the several accounts.

Name of Company ________________. Exhibit 14.

Unexpired Insurance Premiums as at ________ 19 .

Description	Amount of premium (from vouchers)	Period covered From	Period covered To	Unexpired portion of premium Number of days	Unexpired portion of premium Amount	Accrued portion of premium Amount	Total of each class	Amount of insurance On stock	Amount of insurance On permanent property	Make no entry in this section if company keeps insurance record or if company employs insurance agent. Policy No.	Company	Property insured	Amount of policy
	$				$	$	$	$	$				$
Fire Insurance													
Boiler Insurance													
Liability Insurance													
Fidelity bonds													
Use and occupancy Ins.													
Automobile Insurance													
Burglary Insurance													
Hold-up Insurance													
Sprinkler Insurance													
Tornado Insurance													
Miscellaneous													
	$				$	$	$	$	$				$

Note to Reader ---- This form of schedule for unexpired insurance premium should be used in case the auditor verifies the unexpired portion of prepaid premiums, instead of merely obtaining a certificate from an insurance agent or broker. If an insurance register is kept the premiums paid during the year should be balanced with the net charges to the unexpired insurance account or to the insurance account in the general ledger. The policies should be obtained and checked against the entries in the register. In calculating the amount of unexpired insurance group all policies of even date; in case the company has not computed the amount it is well to have a second assistant check the calculations.

Name of Company ______________________________. Exhibit 15.

___% _ _ _ _ _ _ _ _ Bonds Outstanding, as at ____________ 19 .

Description	Par value of bonds $	Accrued Interest: Rate %	Date to which interest is paid	Par value of bonds outstanding $	Interest accrued to last day of fiscal year $	Deduct interest applicable to treasury bonds $	Net accrual $	Remarks
Balance, beginning of fiscal year, per Gen. Led. Trial Balance								
Add: Bonds issued during year (at par)								
	$							
Deduct: Bonds purchased or redeemed during year (at par)								
Balance at close of fiscal year per Gen'l Ledger Trial Balance	$							

Basis of purchase

Par value $	Discount $	Premium $	Accrued Interest $	Actual Payment $

Note to Reader ---- One of these schedules should be prepared for each bond issue outstanding. All information called for thereon should be obtained from the various records of the company, and should verify in detail each credit item and/or each debit item to the specific bond account. The balances at the beginning and end of the fiscal period should be agreed with the general ledger trial balance figures. The accrued interest should be calculated as per the instructions given in the portion of the schedule provided for the interest computation.

Name of Company _______________ Exhibit 16.

Treasury Bonds as at _______________ 19 .

	Par value
	$
Balance at beginning of period, per general ledger trial balance	
Add: Additions during year (at par):	

Par value	Amount paid (if purchased)	Premium or discount (red)	Interest to date
$	$	$	$

	$
Less: Sales during year (at par):	

Par value	Amount received	Discount	Interest to date of sale
$	$	$	$

Balance as per general ledger trial balance at close of period under audit	$
Add: Debits from close of period under audit to date of examination of securities	
	$
Less: Credits from close of period under audit to date of examination of securities	
Balance at date of examination agreed with total count per list	$

Note to Reader ---- The purpose of this schedule is to analyze all debits and all credits affecting this account during the year. A separate schedule should be prepared for each issue of bonds and the balances arrived at should agree with the general ledger trial balances at the beginning and end of the fiscal period, and also with the bonds on hand at the date of actual examination and count of the securities.

Exhibit 17.

Name of Company ______________________

Notes Payable Outstanding and Accrued or Prepaid Interest as of 19 .

				Verification		Accrued or Prepaid Interest				Collateral Pledged					
Name of Payee	Date of Note	Due date	Net Amount $	Request sent	Certificate received	Rate of Interest	Interest paid to	Days to accrue or prepaid	Amount $	Name of security	Value: Number of shares	Value: Par value of bonds $	Verified: By certificate	Verified: Since redeemed and seen	Checked with security schedule

Note to Reader ---- In case interest is both prepaid and accrued two sets of interest columns (similar to the above) should be used, for one represents a deferred expense and the other a current liability; when only one set of columns is needed, the heading should designate the interest either as "prepaid" or as "accrued". See schedule "CC", Appendix A.

Name of Company ______________________ Name of Company ______________________ Exhibit B.

Consolidated Working Balance Sheet as at 19. Consolidated Working Balance Sheet as at 19.

Assets.	Company A (Parent Company)	Company B	Company C	Company D	Company E	Company F	Company G	Company H	Company I	Company J	Company K	Company L	Company M	Company N	Company O	Company P	Company Q	Company R	Company S	Totals for first page	Consolidated Balance Sheet
Capital Assets:																					
Special Funds:																					
Investments:																					
Current Assets:																					
Inventories																					
Accounts Receivable																					
Notes Receivable																					
Marketable Securities																					
Cash																					
Deferred Charges:																					
Inter-Company																					
Totals																					

Note to Reader ---- This form of working sheet has been found very convenient and practicable in preparing the consolidated balance sheet of a large group of affiliated corporations. One sheet is used for assets and a similar sheet for liabilities and proprietorship. The separate balance sheets are listed on the working sheet in the customary way, except that instead of having a special column for inter-company eliminations, all intercompany items, both debit and credit, are listed for each company at the bottom of the Asset working sheet. The credit items are written in red ink and the debit items in black ink. When the columns have all been filled in and the assistant is ready to cross-add the sheet it will be found (in case no error has been made) that the total inter-company black-ink and red-ink items exactly cancel.

Thus, for illustration, the capital stock of the various subsidiary companies owned by Company A would appear in Company A's books as investments in affiliated or subsidiary companies. On this working sheet, however, this total investment properly adjusted would appear in black as an inter-company item, and not as an investment. Similarly the capital stock and purchased surplus represented by Company A's investments would appear in the several subsidiary companies' columns in red, and thus the items, when cross-added, will exactly off-set each other. Likewise, in the manner described, all inter-company items would off-set.

But the greatest value of this working-sheet, and the purpose for which it was really devised, is that it is a very big time-saver. The sheet is used each year on at least one engagement where there are approximately forty affiliated companies to consolidate, and it has saved many hours and perhaps days of time on that engagement alone. Assistants, both those coming from leading University schools of commerce and those entering public accounting through practical bookkeeping work, not uncommonly waste many hours on such work with considerable fatigue and humiliation to themselves, when by making two or three smaller tasks out of it the work would have been completed quite quickly and with comparative ease.

In the working sheet, as illustrated, the assistant would first prove up the columns "Company A" to "Company I", inclusive, putting the final results in the column "Totals for first page". He would then turn over the short sheet and make a second proof for the columns "Company J" to "Totals for first page", inclusive, placing the results in the "Consolidated Balance Sheet" column. If there were still other companies a second sheet of four columns width would be inserted, in which case the column now headed "Company S" would become "Totals for second page", and a third addition would be necessary to obtain the final consolidated figures.

Name of Company _______________ Exhibit 1.

— Sinking Fund — Securities held and income therefrom, Year ended 19

iption bonds	Bonds held for sinking fund beginning of year		Bonds purchased during year				Bonds realized during year			Bonds held at end of year		Inc for Yea
	Par	Cost	Par	Cost and accrued interest	Accrued interest paid on purchase	Date of purchase	Date of sale	Par	Realized	Par	Cost	
	$	$	$	$	$			$	$	$	$	$

Note to Reader ---- When a sinking fund exists and bonds are purchased for and/or are held in the sinking fund it will be necessary ordinarily to prepare a schedule which will show in detail the different investments, together with the transactions in and the income from such investments during the period under review. This schedule serves the purpose very well; a separate schedule would be prepared for each sinking fund being maintained.

The names of the bonds held would be listed down the left of the schedule, while the information called for by the column headings is self-explanatory. In the case of the amount realized from bonds during the year, the accrued interest and the amount realized on principal should be stated separately, but to save space the two amounts may be written one over the other in a single column. The totals obtained for the several columns would support and agree with the amounts shown on a sinking fund summary schedule, whereas the bonds held at the close of the period would be checked against and agreed with the security count.

Name of Company ____________________. Exhibit 19.

Sinking Fund — Securities held and Income therefrom, Year ended ____ 19 .

Description of bonds	Bonds held for sinking fund beginning of year		Bonds purchased during year				Bonds realized during year			Bonds held at end of year		Income for year
	Par	Cost	Par	Cost and accrued interest	Accrued interest paid on purchase	Date of purchase	Date of sale	Par	Realized	Par	Cost	
	$	$	$	$	$			$	$	$	$	$

Note to Reader ---- When a sinking fund exists and bonds are purchased for and/or are held in the sinking fund it will be necessary ordinarily to prepare a schedule which will show in detail the different investments, together with the transactions in and the income from such investments during the period under review. This schedule serves the purpose very well; a separate schedule would be prepared for each sinking fund being maintained.

The names of the bonds held would be listed down the left of the schedule, while the information called for by the column headings is self-explanatory. In the case of the amount realized from bonds during the year, the accrued interest and the amount realized on principal should be stated separately, but to save space the two amounts may be written one over the other in a single column. The totals obtained for the several columns would support and agree with the amounts shown on a sinking fund summary schedule, whereas the bonds held at the close of the period would be checked against and agreed with the security count.

Exhibit 20.

Name of Company

Summary of Sinking Fund Investments from 19 to 19.

Half-year (or year) period ending	Balance at beginning of period (date). Invested			Income for Period			Total funds to invest	Invested		Balance forward		
	Invested		Uninvested	Sinking Fund Contribution	Income on Investments	Total		Par	Cost	Invested		Uninvested
	Par	Cost								Par	Cost	

Details of Investment (form continued)

A.B. Bonds			C.D. Bonds			Etc., etc., etc.			Y.Z. Bonds			Remarks.
Par	Cost	Income	Par	Cost	Income	Par	Cost	Income	Par	Cost	Income	

Note to Reader ---- As a carefully thought out labor-saving device, this summary of sinking fund investments illustrates what may be accomplished. This, or similar schedules, have been used successfully in the case of investigations covering a period of years, and they have enabled assistants to obtain and to summarize the essential information desired in a fraction of the time in which such work otherwise would have been done.

The details of the investment would be continued on a long page (as illustrated in Exhibit 21); the detailed investments prove with the total balance of investments forwarded at the end of each period, while the detailed items of income prove with the total income on investments for the period. Experience and constructive thought on the part of the assistant will prove of the greatest value in the preparation of intelligent, yet time-saving schedules.

Name of Company

Exhibit 21.

Income Adjustment Account for Years Dec. 31, 19— , to Dec. 31, 19— , inclusive.

Nature of Adjustment	Supplemental Jour. Entry No.	Profit and Loss for Year ending Dec. 31, 19— (Deductions in red)	Dec. 31, 19— (Deductions in red)	Dec. 31, 19— (Deductions in red)	Dec. 31, 19— (Deductions in red)	Dec. 31, 19— (Deductions in red)	Net balances of Adjustments Dr.	Cr.	Contra Accounts Surplus Dr.	Cr.	Balance Sheet Dr.	Cr.	Name of Bal. Sheet account
Additional Depreciation Provided													
Adjustment of Factory Inventories understated on books													
Reserve against anticipated Profit in Inventories													
Etc., etc.													
Total Adjustments (as above)													
Summary													
Surplus and Profits as per books													
Adjustments (totals as above)													
Balances as Adjusted													

Note to Reader ---- A working schedule of this general form is ordinarily very useful to an auditor when making an investigation for purchase or for new financing. Such investigations usually cover a period of years, and oftentimes adjustments in the Income Account are necessary in order to state correctly the income of individual years.

In this schedule debits and credits are entered in the same columns; black ink being used for additional credits to income and red ink for deductions from income. In some cases it may be more convenient to use separate columns for debit and credit with reference to each year, though ordinarily the use of two inks reduces the schedule to more usable size.

The nature of the adjustment, that is, whether it is a transfer of income between years, whether it represents provision for depreciation, etc., is recorded in the explanation space and the amount, debit and/or credit, is written under the proper year. In case of a mere transfer of income from one year to another a debit figure (in red) would appear under the year from which the income was transferred, and a credit figure under the year to which the amount was transferred. This kind of adjustment would have no effect upon the surplus or upon the balance sheet.

However, for illustration, if additional depreciation was provided for each year, the amounts applicable to the several years would be written (in red) on the same line in the respective columns. In fact, such depreciation might apply to the prior period, in which case it would be entered in the "Surplus, Dr." column. Upon completing the analysis of income the total net adjustment for depreciation for the years under consideration would be brought into the "Net Balances of Adjustment, Dr." column. This amount obviously is a charge against the total income for the period under investigation, and this total amount plus the charge to the Surplus at the beginning of the period is a credit to reserve for depreciation and so would be written in the credit column under "Balance Sheet". "Reserve for depreciation" would be written in the final explanation columns. In this illustration the net effect is a decrease in the net income for each year for which a depreciation adjustment was made, a decrease in the aggregate income for the whole period investigated and in the Surplus at the beginning of the period equal to the total adjustments, and a corresponding increase in Reserve for Depreciation. Each type of adjustment would be similarly recorded.

Upon completing the adjustments all columns would be totaled. The difference between the debits and credits for each year would show the net change to be made in the book figures for the Net Income of the respective years, whereas the difference between the debit and credit columns under "Net Balances of Adjustment" (and which would prove with the sum of the net changes for individual years) would be the net increase or decrease in the aggregate income for the period under investigation. The changes debit and/or credit to be made in the surplus at the beginning of the period or in the balance sheet accounts would be summarized in the final columns of the schedule.

A summary may then be prepared, as illustrated at the bottom of the schedule, though in reporting to a client it will frequently be found convenient to reverse this order and to present the schedule beginning with the summary, as follows:

Surplus and Income per books . . . . .
Surplus and Income, as adjusted . . . . .
Differences . . . . .

The differences would then be detailed in the schedule as illustrated.

Name of Company ______________.

Exhibit 22.

Income Adjustment Schedule for Years Dec. 31, 19—, to Dec. 31, 19—, inclusive.

Captions (or Explanation)	Balance Sheet (beginning)		First Year		Second Year		Third Year, etc.		Surplus Adjustments of period		Balance Sheet (end of period)	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
As per Books												

Note to Reader ---- This income adjustment schedule is similar in purpose to Exhibit 21, but the book balance of surplus at the beginning and end of the period under investigation, and the book net income for each period to be investigated are included in the schedule. Below the book figures the various adjustments would be made as described for Exhibit 21. Exhibit 22, then, would show as a final figure the adjusted surplus and/or net income, whereas Exhibit 21 merely shows the net changes to be made for each year and for the aggregate period covered by the investigation.

The Surplus Adjustments for the period would include dividends, surplus arising from property appraisals or any other items which were not applicable to the current operations of the years under consideration.